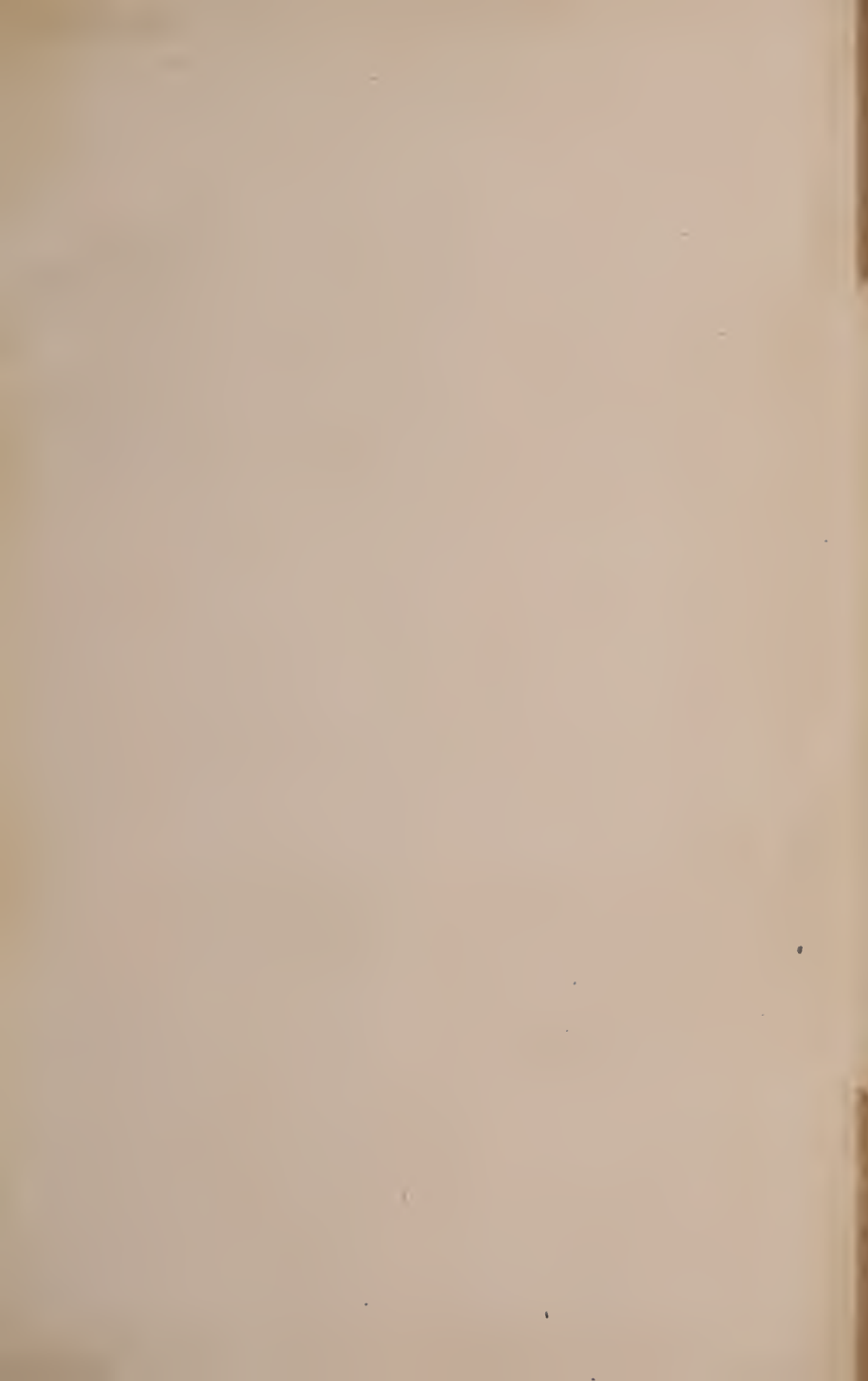


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Journal of the Asiatic
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JOURNAL

OF

THE ASIATIC SOCIETY.

NO. 86.—FEBRUARY, 1839.

ART. I.—*Report on the Settlement of the ceded portion of the District of Azimgurh, commonly called Chuklah Azimgurh, by J. THOMASON, Esq. Collector of Azimgurh, dated Agra, December 16th, 1837.*

1st. The completion of the settlement of Chuklah Azimgurh, affords the opportunity for offering some remarks on its state. The settlement operations have extended from the year 1833 to 1837, and been conducted either by myself, or others acting under my superintendence. I am hence desirous to place on record the principles which have guided me, and to note some circumstances, a correct understanding of which is essential to the future prosperity of the district. My remarks are intended to be strictly practical, and to convey impressions and opinions having reference to the locality.

2nd. A brief statistical account of the Chuklah will form a fitting introduction to the subject.

3rd. It lies between the 25th and 27th degrees of north latitude, and the 82nd and 84th degrees of east longitude. It is bounded on the west by the Oude territories, on the north by the river Goggra and district of Goruckpore, and on the south and east by the river of Benares. The country is generally low, with water near the surface, and abounding in large jheels, or lakes. It is traversed from west to east by several rivers or streams, all of which take their rise from lakes situated either in the district itself or in Oude, at a short distance to the west between the Goggra and the Goomtee, and fall into the Ganges; of these the Surjoo and the Tonse are navigable during the rains, whilst the Phurchee, the Koonwur, the Bainsehee, the Munglaai, the Beysoo, and the Gunghee, are never navigable, but are highly valued for the irrigation which they extensively supply.

4th. The soil is generally fertile, and peculiarly adapted for the cultivation of the Sugar-cane. There are however Salt or *Oosur* plains, which no culture can ever render productive.

5th. The size and general character of the several sub-divisions of the district will best appear from the following tables. They show the arrangements which have been made for the fiscal and civil administration and for the police of the district, and the charge which the establishments constitute on the resources of the district.

I.

Table showing the size and resources of the several Pergunnah Divisions of the Chuklah.

Name of Pergunnah.	Name of Tuppah.	No. of Villages.	Area in Acres of cultivated Land.	Area in Acres of culturable Land.	Area in Acres of uncultivated waste.	Total Area in Acres.	Highest Summa of present Settlement.	Population.
Atrawlee } Tilhenec, }	.. ..	361	43,867	22,642	7,989	74,498	81,587	46,271
Kowreeah, }	.. ..	145	20,924	12,777	4,910	38,611	37,917	18,840
Gopalpoor, }	.. ..	175	16,467	7,417	6,819	30,703	27,920	15,818
Suggree, ..	Akberpoor, ..	71	7,120	1,353	6,620	15,093	14,918	10,599
	Buchour, ..	40	3,203	720	1,681	5,604	5,656	3,494
	Baroohhur, ..	37	3,117	808	3,126	7,051	8,881	4,710
	Birman, ..	35	3,975	1,055	3,330	8,360	7,498	4,461
	Bindrowl, ..	120	11,327	1,986	13,136	26,149	24,417	18,886
	Bilaree, ..	72	6,586	1,451	5,651	13,688	14,245	9,806
	Chinchool, ..	92	10,536	5,316	9,491	25,345	16,794	12,059
	Havelee Khoor- mabad, ..	93	4,684	1,180	3,866	9,730	8,630	5,395
	Khas, ..	64	8,202	7,689	8,152	24,043	14,558	10,908
	Koorkoonar, ..	52	6,118	1,556	3,876	11,550	12,019	3,983
	Total of Pergh. } Suggree, }	676	64,867	23,114	58,932	1,46,913	1,27,646	84,501
Ghosee,	Chakeysur, ..	60	9,760	4,152	3,971	17,883	20,507	7,319
	Havelee,	159	14,800	8,039	15,727	38,566	28,271	11,116
	Simree,	28	3,750	2,401	5,532	11,683	7,951	2,473
	Koorhunee,	65	8,783	3,717	7,121	19,621	17,560	9,958
	Gontha, ..	63	8,118	3,109	6,214	17,441	19,790	11,506
	Total of Pergh. } Ghosee, }	375	45,211	21,418	38,565	1,05,194	94,079	42,672
Nuthoo poor, ..	.. ..	327	38,647	10,276	26,784	75,707	58,887-6	38,724
Mahol,	Uturahee Roo- shungunge, }	89	22,006	7,101	17,429	46,636	46,926	29,181

Table showing the size and resources of the several Pergunnah Divisions of the Chuklah.—(Continued.)

Name of Pergunnah.	Name of Tuppah.	No. of Villages.	Area in Acres of cultivated Land.	Area in Acres of culturable Land.	Area in Acres of uncultivated waste.	Total Area in Acres.	Highest Juma of present Settlement.	Population.
Nizamabad,	Powai,	118	14,923	11,547	5,662	32,132	29,810	14,107
	Deedargunge, ..	162	23,759	15,798	9,140	48,697	52,412-4	30,863
	Mahol,	165	18,783	15,534	5,263	39,580	38,553	22,215
	Total of Pergunnah. Mahol, }	534	79,571	49,980	37,494	1,67,045	1,67,711	96,666
	Utharsee, ..	75	8,557	1,968	3,165	13,690	17,907	18,407
	Belah, ..	112	15,576	5,312	15,461	36,349	41,941	19,106
	Phurchuk }	182	14,205	5,355	12,619	32,209	31,487	19,205
	Havelce, ..	122	12,106	4,120	7,596	23,822	27,995	15,087
	Dobartah, ..	114	19,838	4,427	20,278	44,543	47,982	29,208
	Dowlutabad, ..	56	7,793	1,708	11,203	20,704	20,335	9,004
	Dealpoor, ..	136	13,347	6,873	9,811	30,031	30,658	21,270
	Kotah, ..	83	8,070	2,947	7,494	18,511	18,563	12,495
	Goozarah, ..	130	14,172	4,330	17,241	35,743	41,654	26,889
	Nundaow, ..	140	12,446	4,680	8,959	26,065	28,889	12,946
	Total of Pergunnah. Nizamabad, }	1150	1,26,110	41,750	1,13,807	2,81,667	3,07,411	1,83,617
Kurriat Mittoo, }	Amdhyee, ..	28	2,876	1,691	2,572	7,139	6,844	2,706
	Taree, ..	38	3,596	965	3,100	7,661	7,452	2,554
	Total of Pergunnah. Kurriat Mittoo, }	66	6,472	2,656	5,672	14,800	14,296	5,260
Cheriakote,	Havelce, ..	122	8,185	3,241	3,354	14,780	16,320	8,005
	Khanpoor, ..	78	6,013	2,355	4,102	12,470	11,643	7,121
	Dhurwara, ..	52	7,186	3,099	4,269	14,554	12,152	9,026
	Suleemabad, ..	38	2,575	1,444	1,251	5,270	4,969	3,260
	Total of Pergunnah. Cheriakote, }	290	23,959	10,139	12,976	47,074	45,084	27,112
Belhabans,	Ooturaha, ..	89	12,764	5,312	6,478	24,554	25,548	6,472
	Duhkunha, ..	74	7,218	3,223	3,834	14,275	14,389	8,421
	Total of Ph. Belhabans, }	163	19,982	8,535	10,312	38,829	39,937	14,893
Mahomedabad Gohna,	Oowkaf, ..	30	1,566	903	1,355	3,824	3,757	1,369
	Behrozpoor, ..	121	14,304	8,125	12,187	34,616	32,543	22,800
	Purduha, ..	61	9,842	5,987	8,981	24,810	21,079-8	9,755

Table showing the size and resources of the several Pergunnah Divisions of the Chuklah.—(Continued.)

Name of Pergunnah.	Name of Tuppah.	No. of Villages.	Area in Acres of cultivated Land.	Area in Acres of cultivable Land.	Area in Acres of uncultivated waste.	Total Area in Acres.	Highest Jumma of present Settlement.	Population.
Mhownat Bhunjun, Deogaon,	Chitpoor,	47	5,076	4,662	6,993	16,731	11,966	5,129
	Havellee,	120	8,196	5,178	7,768	21,142	16,155	9,725
	Khanpoor,	64	6,278	3,685	5,527	15,490	12,810	6,816
	Kair,	101	9,819	5,820	8,731	24,370	21,784	9,410
	Nudwan,	78	9,983	4,288	6,431	20,702	20,036	12,628
	Nusseroolahpoor,	72	9,702	5,542	8,314	23,558	19,741	17,987
	Walledpoor,	65	6,295	2,347	3,521	12,163	13,878	8,584
	Total of Ph. Mahomedabad Gohna.	759	81,061	46,537	69,808	1,97,406	1,73,750	1,04,233
	....	64	4,886	3,888	5,530	14,304	11,727	14,625
	Burdah,	81	5,198	1,751	5,252	12,201	12,160	9,377
Deogaon,	Chowree,	70	13,478	3,962	11,883	29,323	25,429	16,164
	Sonaree,	23	3,526	929	2,786	7,241	7,507	4,583
	Saifabad,	22	2,489	756	2,266	5,511	4,759	4,636
	Shahpoor,	52	5,729	1,965	5,896	13,590	12,522	7,737
	Shah Sulempoor,	31	3,814	1,469	4,405	9,688	7,631	3,889
	Kusbah Havellee,	102	7,580	1,992	5,974	15,546	16,533	12,218
	Koobah,	111	12,556	3,249	9,746	25,551	24,001	22,918
	Khurson,	21	2,840	834	2,503	6,177	8,146	4,471
	Total of Pergh. Deogan.	516	57,210	16,907	50,711	1,24,828	1,18,689	86,023
	Grand Total,	5,541	6,29,234	2,78,036	4,50,309	13,57,579	13,06,642	7,79,555

Note.—The total area is inserted, as given by the Survey conducted on the principles of European science. The cultivated and culturable areas are given from measurements made by natives in the method of the country. The Jumma is the maximum which can be reached during the term of the Settlement, but its perfect attainment is dependent on the lapse of some Maafee tenures which are held rent-free during the lives of the present incumbents. The population is given from the average of several estimates made by different persons, and under different circumstances, and has been corrected as much as the nature of the case admits. It is however at best but an approximation to the truth.—Total area 2,121 square miles; and 367.5 inhabitants to the square mile.

II.

Table showing the extent of the several Fiscal Divisions of the Chuklah, and the cost of the Tehseeldaree Establishments.

Name of Tehseeldaree.	Name of Perghs. it contains.	No. of Villages.	Total Area in Square Miles.	Population.			Highest Jumma of Settlement.	Charge of Establishment.	Per Centage of Charge on Jumma.
				Agricultural.	Non-Agricultural.	Total.			
1. Koelsah,	{ Atrawlee- ah Tilha- nee, Kow- reeah, and Gopalpoor. }	681	224	59,421	21,508	80,929	1,47,424	6,336	4 1½
2. Suggree,	Suggree, ..	676	230	65,102	19,399	84,501	1,27,646	4,476	3 6½
3. Ghosee,	{ Ghosee and Mithan- poor, .. }	702	282	53,528	27,868	81,396	1,52,966	4,596	3 0
4. Mahol, ..	Mahol, ..	534	261	69,740	26,926	96,666	1,67,711	5,316	3 1
5. Nizamabad	Nizamabad,	1,150	440	1,34,334	49,283	1,83,617	3,07,411	9,108	2 15
6. Cheria- kote, ..	{ Cheriakote, Keriat Mitthoo, & Belhabans, }	519	158	34,697	12,868	47,565	99,317	4,284	4 8
7. Maho- medabad Gohna,	{ Mahomeda- bad, Gohna, & Mownat Bhunjun, }	823	331	73,765	45,093	1,18,858	1,85,477	4,812	2 9½
8. Deogaon,	Deogaon, ..	456	195	63,517	22,506	86,023	1,18,689	4,008	3 6
Total, ..		5,541	2,121	5,54,104	2,25,451	7,79,555	13,06,642	42,936	3 4½

Note.—The area, population, and Jumma are entered as in the preceding Table.

III.

Table showing the extent of the several Police Divisions of the Chuklah, and the cost of the Establishment.

Name of Tehseel-daree.	Name of Thannah.	No. of Villages.	Total Area in Square Miles.	Population.			Highest Jumma.	Cost of Establishment per Annum.	Per Centage of charge on Jumma.
				Agricultural.	Non-Agricultural.	Total.			
Koelsah, ..	1. Athrowleeah	236	77	22,103	8,219	30,352	57,662	1,824	3 21
	2. Koelsah,	270	99	25,540	9,219	34,759	61,842	1,824	2 15½
	3. Maharajgunje,	175	48	11,778	4,040	15,818	27,920	1,824	6 8½
Suggree, ..	4. Belema-gunje,	227	81	26,981	7,139	34,120	48,855	600	1 3½
	5. Uzmuthgurh,	449	149	38,121	12,260	50,381	78,791	1,284	1 12
Ghosee, ..	6. Ghosee, ..	375	164	23,832	18,840	42,672	94,079	1,284	1 5½
	7. Muddholan,	327	118	29,696	9,028	38,724	58,887-6	1,284	2 2½
Mahol, ..	8. Mahol, ..	283	148	42,477	17,867	60,344	69,634	1,824	2 9½
	9. Deedar-gunje,	251	113	27,263	9,059	36,322	98,077	1,824	1 13½
Nizamabad, ..	10. Kutwal-leea Azim-gurh,	313	141	27,399	17,125	44,524	69,706	1,380	1 15½
	11. Nizamabad,	455	291	47,236	13,059	60,295	95,951	1,272	1 5½
	12. Gunnu-poor,	382	298	59,699	19,099	78,798	1,41,751	1,536	1 1½
Cheriakote	13. Cheriakote,	356	97	22,782	9,890	32,672	59,380	1,404	2 6½
	14. Belhabans,	163	61	11,915	2,978	14,893	39,937	1,356	3 6
Mahomedabad, ..	15. Moobaruckpoor,	400	137	29,238	20,056	49,294	79,143	1,284	1 9½
	16. Kopah, ..	150	70	15,602	15,013	30,615	39,777	1,284	3 3
	17. Mhow, ..	273	124	28,925	10,021	38,949	66,557	1,284	1 14½
Deogaon, ..	18. Deogaon,	456	195	63,517	22,506	86,023	1,18,689	1,320	1 1½
Total,		5,541	2,121	5,54,104	2,25,451	7,79,555	13,06,642	25,692	1 15½

Note.—The area, population, and Jumma are entered as in the preceding Tables.

IV.

Table showing the strength and charge of the Local Establishment on the Jumma of the Chuklah.

Nature of Establishments.	No of unarmed persons on the Establ.	No. of Armed persons on the Establ.	Total of persons.	Cost of Establ.	Per Centage of charge upon a Jumma of 13,06,642.	Remarks.
Sudr. Revenue Establishment,	49	..	49	28,356	2 2½	} This is exclusive of the Akaree, Stamps, & Opium.
Mofussil Tehseeldaree Establ.	126	328	484	12,936	3 4½	
Total Revenue Establishment,	175	328	503	71,292	5 7¼	} This excludes the Jail Establ. & Burkundaze Guard.
Sudr. Magisterial Establ.	15	159	204	34,120	2 9¼	
Mofussil Police Establ.	18	360	378	25,692	1 15½	
Total Magisterial Establ.	63	519	582	59,812	4 9¼	
Sudr. Judicial Establishment,	41	15	56	39,512	3 0¼	
Mofussil Judicial Establ.	6	..	6	3,660	0 4½	
Total Judicial Establishment,	47	15	62	43,172	3 4¾	
Grand Total,	285	862	1,147	1,74,276	13 5¼	

N. B. The Darogahs, Jemadars, Sowars, and Burkundazes are reckoned as armed, the rest are unarmed. The Sudder Establishments show that portion of the charge which should be debited to the Chuklah Pergunnahs, exclusive of Pergunnahs Secunderpoor, and Budaon, which are part of the permanently settled province of Benares. The charge has been distributed on the Jumma, but the total of persons is shown. The higher Civil Establishments are assumed at the average salaries of the respective grades, thus, 1 Collector and Magistrate at 22,500 per annum. 1 Judicial Magistrate and Deputy Collector at 12,000 per annum. 1 Judge at 30,000 per annum. 1 Principal Sudder Ameen at 7,200 per annum. 1 Native Deputy Collector at 4,800 per annum. 2 Moonsiffs at 1830 per annum.

6th. The chief natural products of the district are Sugar, Indigo, and Opium. Comparatively little grain is grown in the district, seldom sufficient for the support of the whole population, which is partly dependent upon importation from the neighbouring district of Goruckpore, or from Behar, or the Western Provinces, as the crops in either direction may happen to have been the most plentiful. The river

Goggra is the general channel for these importations. Golahs, or grain markets, are established all along the course of this stream, and the supplies are thence poured in, as necessary, to all the manufacturing towns in the district.

7th. Sugar is the staple produce. It is cultivated throughout, and always yields a high rent, generally 12 or 15 rupees the acre; but in some parts of Pergunnah Mahol, where the finest Sugar land is situated, it runs as high as 30 or 40 rupees the acre. An effort has been made to ascertain the value of the Sugar annually produced in the district, founded on a calculation of the quantity of land shown by the settlement returns to be under Sugar cultivation, and the average produce of the land. This estimate gives a total area of 1,02,735 beegahs (acres 57,877), the produce of which is 12,32,707 Ghazee pore maunds (11,55,663 cwt.) of Goor, or inspissated juice. This may be valued at 33,89,946 rupees, and is calculated to yield 3,08,177 maunds (2,88,916 cwt.) of Sugar of 1st quality, and 1,23,271 maunds (1,15,989 cwt.) of Sugar of 2nd quality, and to give the manufacturers a net profit of 4,12,957 rupees. For this estimate, I am indebted to the ingenuity and research of my successor in the collectorship of the district, Mr. R. Montgomery. As the calculation is curious, I have given it in detail in the Appendix (A.)

	F.	A.D.		
Price of Goor in	1236	1829..12	Srs. for the rupee	8th. The price of Sugar has varied considerably during the last few years. When that article formed part of the Company's investment, about 5 or
„	1237	1830..12	„	
„	1238	1831..14	„	
„	1239	1832..17	„	
„	1240	1833..23	„	
„	1241	1834..20	„	
„	1242	1835..16	„	
„	1243	1836..16	„	
„	1244	1837..12	„	

6,00,000 were advanced to persons in the district for its supply, and then prices were steady; but when this demand was suddenly stopped in 1832-3, and the Company withdrew from the market, prices of course fell, and some distress was consequently experienced till the trade found new channels. Lately, the reduction in England of the duties on East India Sugar, has occasioned much speculation, and a great rise of prices. It is not likely they will continue long at the same standard, but a much lower rate will handsomely remunerate the cultivator, and lead to considerable extension of the cultivation.

9th. The immediate effect of the demand for the home market has been to draw down to Calcutta a great deal of the Sugar, which till lately had found its way to Mirzapore, and thence to the markets of

Central India, and the Western Provinces. The total quantity for which certificates have been granted under Act xxxii, 1836, from the time the provisions of that enactment came into operation in December 1836, till November 1837, was 1,58,162 maunds. All the raw produce of the district is manufactured into Sugar within its limits, and exported in the refined state. European skill or capital has not yet been largely or successfully employed in the manufacture: this is generally conducted at small native factories scattered all over the districts. There are scarcely any large villages without one or two of these factories, which afford a ready market for the produce of the surrounding country. The largest native factory belongs to Deep Chund Suhoo, and is situated at Decha, in Pergunnah Nizamabad, about eight miles south east of Azimghurh. The same person has also a similarly large factory at Muchaitee in Jaunpore, just on the southern border of Pergunnah Deogaon, whence a great deal of the raw material is drawn. It should however be remarked, that the juice is expressed, and inspissated, i.e. formed into Goor, by every cultivator himself, at simple mills, and boilers erected in the immediate neighbourhood of his field. The manufacturer confines his labour to converting this Goor into refined Sugar.

10th. Indigo was some years ago much more cultivated than it is at present: the quantity now annually manufactured is about 1,500 maunds. It is reckoned a good quality in the market, and brings a good price, but still neither the climate nor soil is peculiarly adapted to the production of the plant; and whilst Sugar is so much in demand, advances can readily be obtained by the cultivators on Sugar-cane crops, and the facilities of procuring land for Indigo will be diminished. Since, however, Europeans have been permitted to hold land, several villages, or parts of villages, have passed into the hands of the Indigo planters by sale, or mortgage, and in these Indigo can be cultivated to any extent that may be found profitable.

11th. About 1,700 maunds of Opium are annually produced in the district. This, at the cost price of 300 rupees per maund, would bring upwards of 5,00,000 of rupees into the hands of the agriculturists. The cultivation of the Poppy is at present confined almost entirely to the *Keorees*, a class of industrious cultivators, some of whom are to be found in almost every large village in the district, conducting the garden cultivation in its immediate precincts. They are generally tenants with rights of occupancy, or at will, and are very seldom themselves proprietors of the land. They constitute almost a separate community, having *Mahtoes* or Sirdars from amongst their own body, through

whom their concerns, especially in the Opium department, are managed. The cultivation of the Poppy might be very much increased, and the north eastern parts of the district are peculiarly adapted for its production; but the expenses attending the cultivation are heavy, and now that Sugar yields so profitable a return, and is so much in demand, it is not probable that the production will be greatly increased at the present price. The cultivation is also generally unpopular; the Zemindar is jealous of his *Keorees* taking advances from the Opium department, because it renders them, in some measure, independent of him, and introduces into the village another authority than his own. The *Keorees* themselves would like the employment, if they were always sure of protection from the exactions of the inferior officers of the department. This of course depends upon the nature and vigilance of the superintendence exercised over the department. At present the organization is far more complete and efficient than it has been for some time.

12th. The manufactures of the district are a considerable source of wealth to it. These consist mainly of Cotton cloths, but some Silk goods are also made, and others, containing a mixture of Cotton and Silk, commonly called Tussur. The demand for these goods used to be very great, but is now much diminished by the competition of English goods. English twist is also very extensively introduced into the market, and has in a great measure supplanted the use of the native thread. This again has much injured the quality of the cloth, for though the English is more regular and even in its texture, it is far less durable than the country thread. The Cloth is made at looms erected in the private houses of the weavers, who are congregated in great numbers at some of the principal towns, such as Moobaruckpoor, Kopah, and Mhow, and are also to be found in many large villages in all parts of the district. They are all Mahomedans, a weak and sickly looking people, but mostly possessing fire arms, and very liable to be excited to riot by any thing which affects their religious prejudices. They have of late years been particularly turbulent, in consequence of the spread amongst them of the tenets of Seyud Uhmud. This sect is especially opposed to the ceremonies of the Mohurram, and the several superstitions which characterize the prevailing belief of the Shecas; whilst, by its general intolerance, it tends to embroil the whole body of Mussulmans with the Hindoo population.

13th. Every loom pays a small acknowledgment to the Zemindar,

under the title of *Kurgahee* (from *Kurga*, a loom). This is commonly called a tax, but it is more properly a rent, or equivalent for permission to reside on the estate, and obtain the protection of its owner. The payment is very trifling, generally of a few annas on each loom in the year; it is highly prized by the Zemindars, and cheerfully paid by the weavers, when no attempt is made to raise the rate, or to infringe upon the established custom regarding it.

14th. It is calculated that there are 13,682 looms in the district, of which 10,561 are for the manufacture of Cotton, and 3,121 of Silk and Tussur goods. These looms probably produce 10,00,000 of pieces in the year, which may be valued at 23,00,000, and are supposed to yield a net profit of nearly 4,00,000 to the manufacturers. The particulars of this estimate, also furnished to me by the kindness of Mr. Montgomery, will be found in the Appendix (B.) It is not likely to be too high, for the value of the exports in Cloth are supposed to be about 10,00,000 rupees, which would leave only 13,00,000 rupees worth to clothe 8,00,000 of people. None but the more wealthy classes wear any other than the manufactures of the district.

15th. It is not easy to account for the existence of these manufactures, so far inland, and in a country where no Cotton whatever is produced. Their rise was probably occasioned by peculiar encouragement afforded by former Governments; and in Mhow, tradition especially states this to have been the case, when the little Pergunnah formed the appanage of one of the Begums of the imperial house of Delhi, in the reign of the Emperor Shah Jehan. Probably, too, the superior fertility of the soil, the uniformity of the climate, and the exemption of the country from the severe droughts which occasionally lay waste other districts, has contributed to this. The great variation of the price of food in the large grain districts, would tend to discourage the formation of a manufacturing community. The habits which would be naturally engendered in a year of plenty would necessarily cause ruin and emigration in a year of local scarcity. On the other hand, a district which is always dependent on commerce for the support of its redundant population, would never suffer much distress, except in a season of general famine, when the whole country would be reduced to equal misery and destitution.

16th. There is not much trade passing through the district. The Goggra and Goomtee on either side of it, and the Ganges at no great distance, are the great channels of commerce. Some Salt finds its way across from the Ganges to the Goggra, and grain is carried back in return, but this is mostly intended to facilitate the supply of the local

wants of intermediate towns. A considerable quantity of Cotton however passes from Mirzapore, and the markets near Allahabad to Goruckpore, and Nipal through Jaunpore and Azimgurh.

17th. The chief Exports and Imports of Goods may be roughly stated thus, though the latter are evidently much underrated—bullion, in shape of cash remittances by the Government, is not mentioned.

Exports.

Cotton and Silk Piece Goods (entirely in hands of					
Native traders),	..	..	..	..	10,00,000
Opium,	..	..	..	..	5,09,700
Indigo,	..	..	..	..	2,70,000
Sugar exported by Europeans,	..	..	..	..	19,00,000
Ditto ditto by Natives,	..	..	..	..	3,50,000
Total Rs.					40,29,700

Imports.

Raw Cotton,	..	..	..	..	2,15,000
Miscellaneous Spices, &c.	..	..	..	..	90,000
Grain,	..	..	..	..	9,40,000
Total Rs.					12,45,000

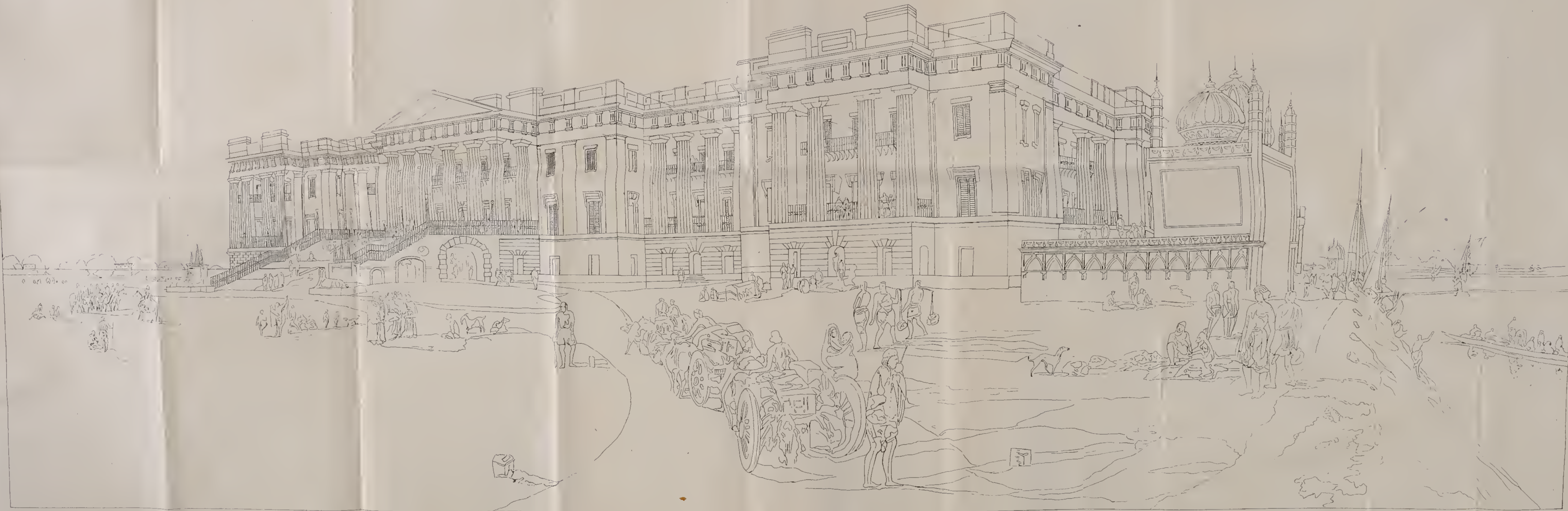
18th. The total Receipts and Disbursements of the Government Treasury in the whole district (including Pergunnahs Secunderpore, and Badaon of the province of Benares,) are Rs. 19,64,150, thus,

Receipts.

Land Revenue,	..	..	..	..	14,77,150
Stamps,	..	..	..	..	35,000
Abkaree,	..	..	..	..	72,000
Miscellaneous,	..	..	..	..	3,80,000
Total Rs.					19,64,150

Disbursements.

Local Expenditure,	..	..	..	..	5,63,000
By Bills,	..	..	..	..	8,27,150
Transported to Benares,	..	..	..	..	5,74,000
Total Rs.					19,64,150



Sketched by W. Jackson

Rough Sketch of the New Palace at Moorshedabad, taken from the N.W.

Oriental Lith. Press, Calcutta



It is only during the last year that so much money has been drawn from the district by bills, and that is occasioned by speculation in Sugar, which is generally paid by bills on the Collector, drawn either direct from Calcutta, or intermediately from Ghazee-pore, Benares, or Mirzapore.

19th. The inhabitants of the district are generally very illiterate. The Rajpoots, who constitute the great mass of proprietors, are seldom able to read or write. Endeavours have been frequently made to obtain returns of village schools, but these have been very unsatisfactory. Indeed there are very few professed instructors of youth; nor is instruction regularly afforded to the youth of any part of the country, except at the Sudder station and its immediate neighbourhood, where the Residents have established schools. In other parts of the country the village *Putwaree*, or some other *Lallah*, occasionally gives instructions in Hindee as it suits his leisure or inclination, and his neighbours will occasionally send their children, and acknowledge his services by small presents, perhaps of money, or more probably grain or other agricultural produce. All Brahmins of any learning have a few disciples attached to them, but this sort of instruction is not professedly for gain. It is restricted to their own class, and partakes greatly of the nature of a religious duty.

20th. The returns show seventy-seven schools, where instruction is given for remuneration. The number of scholars is supposed to be 674, and the total monthly emoluments of the teachers about 300 Rs. per mensem. The great majority of these are for the instruction of Mahomedans in Arabic, Persian, or Oordoo. There are also supposed to be 134 schools where instruction is given to 1,334 scholars, without any express remuneration to the teacher, all of which, with one exception, are kept by Brahmins for giving instruction in Sanscrit.

21st. Having thus generally stated the extent, disposition, and resources of the district, I proceed to explain the nature of the landed tenures, as they are now found to exist. In doing this it will be necessary first to decide in whom the proprietary right to the land actually rests.

22nd. In discussing this subject, it is of little use to view it theoretically, and to refer to the maxims and principles laid down in books of law. Supposing these to be ever so clear and decisive (which they by no means are) it is questionable if they ever were acted upon with any consistency; or supposing them at any time to have been acted upon, the period has long since passed away, and the disuse into which they have fallen for centuries has practically annulled them. It is of

more use to look to the actual state of things, and ascertain as far as may be possible, what that was in any one part of the country, or at any particular time. It is my purpose to do this as far as I may be able, for the tract of country to which this report refers, and for such period as we may have tradition or history to direct us.

23rd. The whole of Azimgurh must have originally formed part of Rama's kingdom of Ujodhya. The inhabitants of that time are called by the present race of men *Rajburs* and *Assoors*. The latter is evidently only another instance of the tendency to attribute every thing that is old or wonderful to superhuman agency. There are still existing a race of men called *Burs*, a very low class, who generally tend swine. They are said to be the descendants of the aborigines, and it is not impossible they may be; but they have lost all traces of their original character, and I do not know a single instance of their now possessing proprietary right.

24th. The inhabitants of the country, by whatever name they are distinguished, were a powerful and industrious race, as is evident by the large works they have left behind them. Immense mud forts still exist, such as are seen at Hurbunspoor and Oonchagaon, near Azimgurh, and at Ghosee, which are attributed to them; and traces of a large excavation still exist, which seems to have connected the Koonwur and Munghai Nuddees, and is known by the name of Asooraen. The Huree Bandh at Ameinuggur, in Pergunnah Nizamabad, is another work generally attributed to them.

25th. These people were overwhelmed by incursions of Rajpoots, who seem to have come over from the west, under different leaders, and to have completely subjugated the country. Whether the incursions were successive or simultaneous, or at what time they took place, there are no means of ascertaining. An inscription found in Deogaon shows that in the middle of the twelfth century that Pergunnah was included in the dominions of the king of Canoje, and was probably a favorite place of resort for the court.

26th. These invasions of the Rajpoots are the foundation of the present existing proprietary right in the land. Different tribes located themselves in different spots. The descendants of each chief multiplied, till at length, in some instances, they displaced all other occupants of the land, or at least assumed to themselves all proprietary privileges. The stocks were numerous: each Tuppah, or sub-division of a Pergunnah, is marked by the prevalence of its own stock. These all pretend to trace their origin to a single person, who first conquered the country. Thus, the Gautum Rajpoots came from the Dooab un-

der two leaders, Gen Rai and Men Rai. They established themselves in Tuppah Dowlatabad, and there founded two villages. Mehannugur was the residence of Men Rai, and Goura of Gen Rai. To one of these two stocks all the Gautums of that part of the country trace their origin. It is impossible to say when this incursion took place, but circumstances will afterwards be stated, which show that in the beginning of the seventeenth century, the family had increased to such an extent, that some of the stock were obliged to leave the country in search of subsistence.

27th. It is not to be supposed that the families regularly multiplied without interruption from the first stock to the present day. Violent changes constantly took place. Tribes were swept away by the incursions of foreigners, or by the aggressions of their neighbours. During the fifteenth century the kings of the Sherki dynasty from Jnanpoor, exercised great sway in the district. Parts of the country seem indeed to have been held by Mahomedans. Pergunnah Belhabans is said to have been peopled by Mahomedans, who were exterminated by an incursion of the Bais Rajpoots, who are at present in exclusive possession of the country. Thus too Tuppah Shah Suleempoor, in Pergunnah Deogaon, seems both from its name and the numerous Mahomedan tombs still existing, to have been not very long ago in the possession of Mussulmans, though it is held entirely by a race of Bhoomjars, who came originally from Goruckpore, and are of the same stock as the Rajah of Benares.

28th. The occasional incursions and supremacy of the Mussulmans is strongly marked in different parts of the country by the existence of shrines and tombs of Shuheed Murds, who are believed to have fallen in contests with the inhabitants of the country, either Hindoos, if in later times, or evil genii, if in older times. Thus the town of Mhow obtains its distinctive title of 'Nath Bhunjun' from the exploit of a saint called Mullick Tahir, who expelled the evil genius Deo Nauth, and made the country habitable by men; or, in other words, was some adventurer, who drove out the original inhabitants, and located a colony of Mussulmans. The followers of Mullick Tahir have however long since given place to a colony of Dhoonwar Rajpoots, and no trace of the exploit now remains but the old shrine, with numerous other graves strewed around it, where the devotion of all classes, Hindoos as well as Mahomedans, constantly keeps a light burning. Instances similar to this are numerous.

29th. Near the close of the 16th century a member of the Gautum family of Rajpoots in Tuppah Dowlatabad, Pergunnah Nizamabad,

who had left his native village of Mehannuggur, in consequence of the smallness of his share being insufficient for his support, found employment in the imperial court at Delhi, turned Mussulman, became an eunuch of the palace, and obtained in the fourth year of Jehangire (A.D. 1609,) a grant of the Zemindarry of 22 Pergunnahs, in which Chuklah Azimgurh was included.

Rajah Ubluman Sing
Alee Mahomed Nadir
Dowlut Khan,
Rajah Hurbuns,
Rajah Dhurnee Dhur,
Rajah Azim Khan,
Rajah Ikram Khan,
Baboo Mahabut Khan,
Rajah Iradut Khan,
Rajah Jehan Khan,
Rajah Azim Khan.

From A.D. 1609 to A.D. 1771, nine successions of these Rajahs are said to have taken place. Their power appears to have varied greatly. Their rule is said to have been very oppressive. They never paid more than 50,000 to 1,00,000 Rupees into the imperial treasury, and even this was often withheld, and the efforts of the Rajahs are said to have been uniformly directed to the annihilation of all other rights but their own. The Canoongoes were proscribed, and all Pergunnah records that could be found destroyed. Hence none are now found of a date belonging to this period, or prior to it. The Rajahs were first much resisted by the other tribes of Rajpoots, and it was not till after much fighting that Azim Khan, the fourth of the race, about A.D. 1620, overcame the Bais Rajpoots of Uthaisee, and founded the Fort of Azimgurh. Mahabut Khan (said to have reigned from 1677 to 1722) was the most powerful, and established his authority from the Goggra to the Ganges. In 1771, the Nuwab of Oude, Shoojahood Dowlah, resumed the grant, expelled and proscribed the family, and governed the district by Chukladars, till it was ceded to the British in 1801.

30th. Subsequently to our acquisition of the country, the descendants of this line sued the Government in the Provincial Court of Benares for their restoration to the Zemindarry. The suit was of course thrown out, but in the course of it the claimants produced an Altumgha Sunnud as the foundation of their right, granted in the fourth year of Jehangire. Doubts may be entertained of the authenticity of this document, but there is no reason to doubt that some such Sunnud was given, and the document produced in Court, if not the identical one, was probably an imitation of it, or at least was drawn up in the form which such grants generally assume. As the document possesses some interest, from the light it is calculated to throw on the proper meaning of the much contested term *Zemindar* I subjoin a copy of it, and a translation in plain English, divested of the redundancies of the original.

درینوقت میمنت اقتران فرمان
والاشان واجب الاذعان صادر شده که
اشمن سنگه زمیدار منه نگر نظام آباد
از بنده مقبول بارگاه والاجاه بدین
اسلام درآمد نظر بر استحقاق بخطاب
راجه نادر دولتخان ممتاز شده بسمت
ودو پرگنه از صوبه اله آباد ابتدا
نبیسان خریف نسخا قوئیل حسب
الضمن مرحمت فرمودیم باید که
فرزندان نامدار کامگار و اعتبار و وز
رای ذوی الاقتدار و حکام کرام و اعمال
کفایت فرجام و متصدیان مهمات
دیوانی و متکفلان معاملات سلطانی و
جاگیرداران حال و استقبال ابداء و مو
بدا در استقرار و استمرار این حکم
مقدس و معلی کوشیده بر زمینداری
پرگنات بخطاب مذکوره نسلا بعد
نسل و بطنا بعد بطن خالدا و سخلدا
بحال و برقرار داشته بزرهای
مشخص مال واجب سرکار مبلغ یک
لکھ و بسمت و پنجهزار روپیہ نانکار بر
قبولیت مجرا داده باشند که مع
سرحد و سردیہ و غیره ابواب
زمینداری صرف معشیت خود
پردازد و از تصادم تغییر و تبدیل این
امر مقدس مصیون و محروس داشته
سند مجدد نطلبند و از یرنیغ کرامت
تبلیغ والا انحراف نه ورزند یازدهم
شهر ربیع الآخر سنہ چهارم جلوس فقط

It has happened in this propitious time that Ubhinan Sing, Zemindar of Mehannugur in Nizamabad, has embraced Islamism, and been honored with the title of Rajah Nadir Dowlut Khan. We have therefore bestowed upon him 22 Pergunnahs in Soobah Allahabad from the commencement of the Khureef Crop, and according to the specification below. Our illustrious sons, and rulers of the provinces, and Mootsuddies must ever use their strongest endeavors perpetually to maintain this grant, and confirm the Zemindaree of the above Pergunnahs to the afore-mentioned person, and his descendants, for ever. They will deduct 1,25,000 Rupees, as his Nan- kar from the total Jumma payable to the Government, in order that he may spend it, and the fixed allowance per village and per centage in the Jumma and other Zemindarry dues for his support. This Sunnud will not require renewal. Dated Rubeeool Ak- hir 15th, in the 4th year of the reign.

ضمن مینو یسد

پرگنات حسب ضمن بست دو
پرگنه نانکار یک لک ۲۰ هزار پرگنه
نظام آباد پرگنه کوریہ سلہنی پرگنه
گوپال پور پرگنه سگری پرگنه
محمد آباد پرگنه گھوسی پرگنه
جکسر پرگنه نتھو پور پرگنه چریا
کوت پرگنه قریات متو پرگنه بلہا
بانس پرگنه دیو گانو پرگنه نانانت
بہنچن پرگنه شادیا باد پرگنه
بھیری آباد پرگنه پچو تر پرگنه
سیدپور بتري پرگنه ظہور آباد
پرگنه بھد اون ابواب زمینداری
وغیرہ سی صد یکروپیہ

Specification on the reverse.

Pergunnahs 22, Nizamabad,
Kowreea Tilhenee, Gopalpore,
Suggree, Mahomedabad, Goh-
na, Ghosee, Chukeysur, Nu-
thoopoor, Cheriakote, Keriak
Mittoo, Belhabans, Deogaon,
Mownat, Bhunjun, Shadec-
abad, Behreeabad, Puchotur,
Seydpoor, Bittree, Zuhoorab-
bab, Bhudaon.

Nankar 1,25,000 Rupees,
Zemindarry dues per village
2 Rs., per cent 1 Rs.

31st. If the holder of this Sunnud had been in power when we first acquired the country, it is not improbable that we should have acknowledged him sole proprietor of all this tract of country, and have reduced the real proprietors to the rank of mere tenants.

32nd. From these revolutions the Pergunnah of Mahol was generally exempted. A family of Seyuds obtained possession of it in a Zemindarry grant at a very early period, the tradition of which is now lost. They contrived to locate themselves firmly in the Pergunnah. Branches of them entirely suppressed the Rajpoot communities in many of the villages. The Rajah was dispossessed of the government by the Nuwab of Oude, previous to our acquisition of the country, but he still retains many villages as his private property. Some of these have passed from him, by sale for arrears of revenue, to the hands of the notorious Amil Sheo Lall Dhoobe, and yet in some of these villages the old Rajpoot communities exist, though they have long been broken down, and the members reduced to the rank of mere cultivators on fixed rates. Instancees sometimes occur of the strength with which ancient proprietary associations are maintained, even long after all exercise of the rights has ceased. The two contiguous villages of Mohujah and Newadah had long been held by

the Mahol Rajah. Soon after the cession they passed, by public sale, into the hands of Sheo Lall Dhoobe. No proprietary right had ever been claimed by the village communities, and yet in 1834 they fought regarding their common boundary, and lives were lost on both sides.

33rd. The above historical facts have been mentioned merely to illustrate the mode in which the proprietary right was generally exercised, and how this right was transferred, and the present existing diversity of tenure introduced. I suppose the original conquest of the Rajpoots to have been the general foundation of the existing proprietary right in the soil. That right we often still find exercised in its original purity, but in many places no trace of it can be found. A few instances in which the mode of its annihilation, and the rise of a subsequent right is known, may account for these irregularities.

34th. Tuppah Hurbunspoor extends along the south bank of the Touse, opposite to Azimgurh. It was held originally by a tribe of Sukrawar Rajpoots, a remnant of whom still survive in Ooncha-gaon. In order to strengthen their fort, the Rajahs of Azimgurh determined to lay waste a great part of this tract, and encourage the growth of jungle upon it. The Sukrawars were accordingly expelled, and the country depopulated. The soil however is rich, and in time, when the whim of the day had passed away, it was considered desirable to bring this tract again under cultivation. The Sukrawars were, however, then broken and ruined, and in no condition to assert their rights in opposition to the Rajah of the time. In this space, accordingly, to the south of Azimgurh, in its immediate vicinity, we find all sorts of tenures existing. The village of Siddharee was given to Baboo Baz Bahadoor, a member of the family, and added to his Talookah. He located cultivators upon it, and it is now his absolute property. A portion of land, formerly called Sarungdurpoor, was given to Ikram Khan, who brought it into cultivation, and there located a body of Puleear Rajpoots from Sumaidah, in Tuppah Behrozpoor, Pergunnah Mahomedabad, and called the place Ikrampoor. He passed away, and the resident Rajpoots became recognized as the proprietors. Thus too Jaffurpoor is formed out of the land of the old villages of Pooranahpoor, Bullaisur, and Golwarah. Baboo Jaffur Khan brought the land into cultivation, and located some Dhoonwar Rajpoots, who afterwards, on the extinction of his family, became the proprietors. Another tract of this waste land was assigned to some Buneeahs, who brought it into cultivation, built a large village, and have left traces of their industry and wealth in numerous topes, and some artificial bunds for irrigation. This village was called Bodhaitah. In the days of the Chukladars it was plunder-

ed, and the inhabitants massacred ; since which time it has remained without one inhabitant (Be-chiragh). In default of other claimants, the Canoongoe of the Pergunnah engaged for it, and now holds it in proprietary right as his Zemindarry. A Bunniah in Azimgarh, who claims his descent from the old proprietors, attempted to establish his right in the Special Commission Court, but failed. Ask any intelligent resident in the neighbourhood, who is the rightful Zemindar?—he will answer, the Bunniah. Question him more strictly, and he will admit the prior right of the Sukrawar Rajpoots. Tradition reaches no higher.

35th. Achar, and its dependant villages in Pergunnah Mhownat Bhunjun, was held by a tribe of Kaut Rajpoots. The Dhoonwars of the neighbouring estate of Khabseh were the more powerful: they attacked, and massacred most of them. The little mud Ghurree is still shown where the last who held their ground were put to death. This took place only a few years before the cession. Some of the family fled into the neighbouring district of Ghazeepore, then in our possession, and have in vain since attempted to recover their rights.

36th. A family of Chundel Rajpoots emigrated from the Juanpore district and settled in Pergunnah Nuthoopore, where they acquired much land about the place where the Durgah of Kullooah Bund has since flourished. A chur was subsequently thrown up between the Kuttooby Talow and the river Goggra. Of this chur the Chundels took possession. Their prosperity kept pace with the increase of the chur, and the Chundels of Doobarree are now one of the most flourishing clans. Their Talookah till lately was included in Pergunnah Secunderpore ; it has now been annexed to Nuthoopore.

37th. In many cases the origin of the present Zemindarry right has been the rent-free grant of waste land to the ancestors of the present proprietors, such grant having been made by the actual sovereign, the Emperor of Delhi, or his local representative. The grantee brought the land into cultivation, and as the former proprietors had passed away, on resumption of the grant by some succeeding ruler, was acknowledged as proprietor. Some terms of this sort are said to have had their origin in grants by the Sherki sovereigns of Juanpore.

38th. The appropriation of waste lands was sometimes, however, founded on mere acts of usurpation by powerful individuals or communities, or has grown up by sufferance. Thus the powerful Pulwars of Kowreeah have encroached on the neighbouring forest land in Pergunnah Nizamabad. Their occupation of Kadarampoor is a case in point. The rise of some Aheer communities appears to illustrate the latter mode of appropriation noted above. These people

were familiar with the forest, fixed their residence on some favorable spot, and began to cultivate ; and when a settlement came to be made, appeared to be the most convenient persons to admit to engagements for the land. Thus the villages of Tumbolee in Tuppah Phurchuk Havelee, Pergunnahs Nizamabad and Muhason, in Tuppah Chitpore, Pergunnah Mahomedabad, are held by Aheers.

39th. These instances serve to show in what way the original proprietary right, resting on conquest, may have often terminated, and been replaced by another right founded on grant of the ruling power, actual usurpation, or voluntary act, sanctioned by sufferance. It is immaterial now to discuss the validity or the legality of the circumstances, which originally created the right previous to our rule ; it was asserted and maintained whenever there was strength enough to support its assertion. Since our rule commenced, it has been recognized, legalized, and consolidated. When no other private rights are prejudiced by the recognition, its admission must be beneficial.

40th. Under the circumstances stated above, the proof of the proprietary right is of very different degrees and nature.

41st. It is of course strongest where the village communities have flourished for centuries, and where they have been powerful enough to hold together, and to keep out intruders. In other cases, where the origin of the right is not so clear, we find it settled on the prescription of many years, and capable of immediate adoption. Generally in the formation of a settlement, possession is the point regarded, and if this be for only a few years, it is still sufficient to give a title, till a better be shown ; it being always borne in mind, that possession is only good as far as it goes, and that a Talookdar who has been recorded by us as Zemindar, may still have below him bodies of people, exercising full proprietary rights, and entitled to the recognition and confirmation of all those rights. In the settlement however of Towfeer Mouzahs, and of resumed Maaffees, the greatest difficulty often occurs. Here the proprietary right has been long in abeyance. All around a proprietary right is exercised, and has been so for ages, so that there is every reason to believe it has existed on the spot in question, but it has been in abeyance once, and perhaps disputed for so many years as to be difficult of determination. If wells have been dug, or trees planted, or bunds erected on the spot, these are always appealed to as proofs of old proprietary right. The enjoyment of the fruit of the trees, or of the fish of the ponds, or of any other of the spontaneous products of the soil, are adduced as proofs of possession of that right. It is a common and convenient practice to refer to the Canoongoe's records, though these are of doubtful authority. Under present rules the case

is referred to a jury, but even they are often perplexed, and I have known cases where contending parties have agreed to leave the determination of the point to lot.

42nd. In rent-free lands some neighbouring Zemindar has generally acquired some recognition of his proprietary right from the Maafeedar, either by direct money payment, or by an allowance of land called *dobisnee* (i. e. equal to two biswas in the beegah, or ten per cent. of the whole area) free from the payment of rent, or by cultivating a large portion of the land on favorable terms. Generally too the Zemindar appropriates to himself the *sayer*, or spontaneous productions of the land, but all these of course often depend on the relative strength of the Maafeedar and of the claimant of the Zemindarry.

43rd. In the large *co-parcenary* villages, intricate questions sometimes are raised by the claimants of shares, and it becomes difficult to decide whether a man is a sharer or not. A member of a village community often falls into distress, either because his share is really inadequate to his support, or because he has become impoverished by his own fault, or by misfortune. Under these circumstances he may make over his share to a *co-parcener*, or let it lie waste. In either case he may leave the village, or continue to reside in it. If he continue to reside in the village, he may still have his share of the *sayer*, though he have no cultivation. If a partition of waste land attached to a village takes place, he immediately asserts his claim, and if the settling officer were to take the determination on himself, he would find the task no easy one.

44th. I have thus endeavored to show the probable origin of private proprietary right in the land, and of the forms under which it is found to be at present exercised. I will proceed next to classify these forms, and to point out the principal features which characterize them.

45th. The proprietary right in the land may rest either in a single individual, or in a community of people. This community may divide amongst themselves the profits of the estate either according to their ancestral shares, or according to some arbitrary rule, having reference to the quantity of land which each member cultivates. Of the two latter tenures the former has been sometimes styled the *Zemindarry*, the latter the *Putteedarce*, or *Bhyachara*. None of these terms have local application. The term *Zemindar* is generally applied in the district to any one having a proprietary right in the land, whilst *Putteedar* is restricted to those members of the village community who are not under engagements directly with the Government. The term *Bhyachara* is not known.

46th. We will proceed to consider separately the three classes of tenures mentioned above. First, those where the proprietary right rests in a single individual.

47th. All these are evidently liable to partition under the existing laws, in the course of the succeeding generations. The vesting of the entire right in an individual is rather incidental than natural to the tenure, and yet deserves special notice, because it is generally created in a way that brings with it special rights and relations. The sole proprietors of villages are mostly those who have purchased them at public sale for arrears of revenue, or under decrees of Court, or by private contract.

48th. Purchasers by public auction, on account of arrears of rent, must be held to have become possessed of all of what is commonly termed the Zemindarry right. From the cultivated land they may collect the established and fair rates: of the uncultivated land they have the entire disposal. The *Sayer*, including the *Phulkur*, the *Bunhur*, the *Julhur*, and whatever Zemindarry cesses are levied in the village, of right belong to them, as does also the whole of the timber, which is not the personal property of the resident who planted it, or his heir. With the former non-proprietary cultivators the relations of the purchaser are well defined. He steps into the place of the former proprietors, and is entitled to collect whatever they used to collect before. From the old proprietors he is entitled to demand for their *Seer* the average rate paid in the village, or its neighbourhood, for similar land, by similar classes of cultivators, though this may be some times difficult to determine immediately.

49th. An individual may have become possessed of a village under sale in satisfaction of decrees of Court, and this is more frequently the case than might be expected, even where the former proprietors were numerous. A wealthy and intriguing man who once gets a footing in a village will soon contrive to bring the interests of all the others to sale, and by purchasing them, become himself the sole proprietor. The right thus acquired is evidently more absolute than where it rests on sale for arrears of revenue, though the latter gives the better title. The latter absolutely transfers only the Zemindarry right, guaranteed by the State against all other claimants; the former gives the whole of the rights and interests of the persons whose estates were sold, but liable to challenge by any other claimants. In the latter case, the old proprietors retain their rights as cultivators; in the former, they lose them, and sink to the ranks of mere tenants at will.

50th. Purchases under special contract are of course ruled by the terms of the contract; but here, as well as in the case of sales under

decrees of Court, our mistaken practice has introduced much confusion. It became customary to consider the recorded Malgoozar the absolute proprietor of the whole share, for which he paid the revenue; and hence the sale of his rights and interests was held to be a conveyance of the whole share; a transfer of the names was made in the Collector's books, or, in technical terms, *Kharij Dakhil* was taken out, and it became no easy matter to determine what really was transferred. No doubt recorded Malgoozars have often taken advantage of this misapprehension of their rights seriously to injure their co-parceners and enrich themselves at their expense, but great injustice has also been caused the other way. A *Putee* has raised money on mortgage, or stood security in the name of its recorded Malgoozar, and received all the benefit accruing from either transaction; and afterwards, when the terms of the contract have come to be enforced against them, have endeavored to throw the whole weight on the Sudder Malgoozar alone. The Government has frequently been thus a loser by accepting a Sudder Malgoozar as security in the full amount of his recorded liability. Cases of this sort must of course be decided each on their separate merits. I would only mention one rule, which I have found arbitrators adopt. Co-parceners living together, and holding their property jointly and undividedly, are held to be bound by the act of their recorded managers. The presumption in such cases is strongly in favor of common agreement to the act, and they must be very strong and peculiar circumstances which could establish a right of exemption from all the liabilities implied in the deed.

51st. Talookahs are not always held by an individual, but they frequently are held either by one person or by a few living together, and exercising their rights as one. Any collection of villages held together, either by one person or by many, is in the common usage of the district called a Talookah; but I employ it here in the more restricted sense in which it is generally received in the Western Provinces, as meaning a collection of villages, each having a separate community of its own, which by some act of the ruling power had been assigned to an individual, who was to collect the revenue from them, and pay over a certain portion of it to the Government.

52nd. Of such Talookahs there are not many in Azimgurh, nor are the few that exist of any great size. Talookah Baz Bahadoor perhaps is the only one which deserves very particular notice. Baboo Baz Bahadoor was a junior member of the family of Gautum Rajahs of Azimgurh, already mentioned. He obtained from the Rajah of the time several villages. Some of them were waste, and he brought them into cultivation; some of the village communities were weak, and

either he hoped to crush them, or they anticipated advantages from being placed under his care. He thus acquired about 20 or 30 villages in different Pergunnahs, and by superior address managed to keep some hold of them till we acquired the country. Our first act was of course to call him Zemindar, and constitute him absolute proprietor of the whole. He himself however was not in a condition to avail himself altogether of the favorable opportunity. He fell into pecuniary difficulties—was obliged for sometime to make over his estates in mortgage to a banker, and at the last settlement was unable to enter into engagements himself, and saw many of his villages transferred in farm to the members of the village community. Now in some of these villages the Talookdar was the only claimant of the proprietary right. The lands had been waste, and he had brought them into cultivation at his own cost, and here his recognition as Zemindar was proper. Where, however, the village communities had retained their rights, these were confirmed to them with reservation of a Talookdaree right. Some cases were found in which the Talookdar had never exercised any right whatever over the village, nor derived any profit or emolument from it for many years, although he had all the time been nominal and recorded Zemindar. These were severed from the Talookah and settled with the proprietors.

53rd. If the proprietary right rests in many members of a village community, they many divide the profits according to their ancestral shares, or according to some arbitrary rule regulated by the quantity of land in the cultivation of each proprietor, or, in other words, his Seer land.

54th. When the profits are divided amongst the several co-parceners according to their ancestral shares, they may, or they may not, be cultivators of the land, i. e. the holders of Seer. The simplest form which the case can assume, is when they all live together as a joint undivided family, one person managing the estate for the rest, or appointing a common manager, and dividing the profits at the close of the year. Sometimes they divide the estate, their responsibility continuing joint—sometimes the cultivators only are divided by the Putwaree, each collecting from those assigned to him; and this assignment may take place annually, or when once made may continue in force till a re-partition is demanded. There are instances where each person collects from each cultivator the portion of the rent which is his share, but this is very uncommon.

55th. When the proprietors cultivate themselves, the case is rather more involved. If the Seer of each parcener bears the same proportion to the total quantity of Seer land, that his share does to the

whole, the Seer may be thrown out of account and the collections from the Assamees divided amongst them, according to their shares. This however is seldom the case. It is more usual to levy a rate on the Seer land, either the same that it would bear if cultivated by Assamees, or some other fixed and arbitrary rate, generally a low and favorable one. The village accounts being thus made up, the profits are divided according to the shares. In this case, if the rate levied on the Seer land is the same as on the Assamees land each parcener can take up as much land as he likes as his Seer, otherwise there are constant bickerings on the subject, for of course the increase of Seer cultivation diminishes the rent roll.

56th. When however the proprietors live separate, but divide the profits amongst them, it is by far the most common to divide the estate, and each person to manage his own share as he likes. In course of time, however, inequalities arise either in the quality of the land in one share by superior management, or by the gradual encroachments of one share on the common waste land. This gives rise to violent disputes—some claiming re-partition, others resisting it. These disputes are commonly called in the district, "*kum a beshee*," i. e. where the contending parties affirm that the shares are less or more one than another. The man who thinks he has less than his right, claims to pay not according to his ancestral share, but according to his possession. This is not admitted by the other, and default ensues. Estates have thus been often brought to the hammer, at the time when sales by auction were the favourite means of realizing the public demand. Now they constantly lead to attachment of the estate. The only effectual method of terminating such disputes is by re-partition of the whole, presuming, of course, that participation according to ancestral share be an admitted feature of the tenure. Clause 2, Section XII, Regulation VII, 1822, evidently contemplates cases of this sort, and confers the necessary power on the settling officers. Disputes of this nature are most common in the Pergunnahs of Kowreeah, Gopalpoor, and Atrowlceah Tillencee, and they also occur in Deogaon.

57th. But where the proprietary right rests in a community, the profits of the estate are often enjoyed not according to the ancestral shares, but according to some arbitrary apportionment on the Seer land of each proprietor. This apportionment of profit shows itself in the form of a reduced rate of assessment on the Seer land. In such cases the Government revenue is said to be paid or made up by a *bach*, on the Seer. These tenures of course suppose that each proprietor is himself a cultivator, though it may so happen, and sometimes

does, that the proprietor is not a cultivator, but has acquired the share by purchase, public or private, from a cultivating proprietor. Where the profits of the estate are divided according to ancestral shares, the Seer of a Zemindar is that which he has under his own cultivation, i. e. which he has cultivated at his own cost, and by his own capital. In tenures however of the kind which we are now considering, the word Seer acquires as it were an artificial meaning. It is that portion of the land in the possession of a sharer on which he pays the *bach, h*, and which when compared with the total amount of Seer in the village, represents his interest in the estate. It depends upon the custom of the estate whether this be all or any part in his actual cultivation, or whether he have any other cultivation in the village than this. Instances are not very common where the sharer cultivates no part of his Seer, and they generally arise, as above stated, out of forced, or voluntary transfers from cultivating proprietors. It is common however for the proprietor to under-let a part of his Seer, obtaining from the tenant the full Ryottee rates, and paying himself only according to the *bach, h*. Instances are not common where the proprietors cultivate more than their Seer. One singular case deserves special notice. In Mowzah Oomahpoor, Pergunnah Mhownat Bhunjun, thirty-six beegahs were set apart in the village, and each sharer's right was determined by the portion of this thirty-six beegahs which he cultivated. It was his Seer, but besides this he might cultivate as much more of the village as he liked at the common Ryottee rates, and so all the sharers did to a considerable extent. Other instances probably might be found where sharers cultivated the land of other sharers, or the common lands of the villages, at the usual Ryottee rates, but they do not come permanently into notice.

58th. It is evident that the Seer land may in such case bear any proportion to the Ryottee. It may be very small, and the great bulk of the estate may be cultivated by persons claiming no proprietary rights in the estate, or it may absorb the whole of the estate, which in that case is parcelled out amongst the several co-parceners as their Seer. The latter is commonly the case in the old Rajpoot communities, which have been strong enough to resist all the changes which violence or fraud so often effect. In Tuppahs Chowree and Koobah, in Pergunnah Deogaon, and in a great part of Pergunnah Belhabans this prevails. The members of the Rajpoot communities are very numerous and strong. They will not admit that there are any cultivators but themselves, and record the land as their Seer, each man paying a proportionate share of the Jumma according to the *bach, h*. There is strong reason to believe that this is by no means so generally the

case as they aver. They have no idea that an arrangement of this sort enables them more effectually to conceal the real resources of the village, and would be more effective in resisting the inroads or power of an auction purchaser, if any one were to attempt to take their estate at a sale for arrears of revenue. It is certain that many under-let their Seer, and do not cultivate at their own risk. All aver that they give portions of their Seer in payment of service to their ploughmen, herdsmen, and other agricultural labourers. The Putwaree however does not enter these appropriations of the Seer in his accounts: their all appears as Seer, his papers merely showing the extent of each man's Seer, and the portion assessed on him for payment of the Jumma and village expenses. An exception to this may perhaps be said to exist in what are called in Deogaon, Muzhooree Ryots; but these are only persons to whom the village community have made over shares which have lapsed, or are in abeyance from any cause, so that the land may not be waste and leave a heavier burden on the rest of the village. Where the whole of the land is Seer, in these cases the custom which regulates the payments is called *bhaiunsee*, in other places it is called *beegah dam*; in both, the practice is the same. The payments of the early *kists* are made according to a low established rate on the Seer land, and towards the close of the year the whole community assemble to audit the accounts. The village expenses are added to the Government Jumma, and from the total is deducted the payment of the Ryots, if there are any. The remainder is distributed according to the *bach, h* upon the owners of the Seer land.

59th. This audit of accounts (or *boojharut*, as it is called) is a most important process to the whole of the community. The right of admission to the audit is the criterion of proprietary right. It may so happen that a proprietor has lost his Seer, either from poverty or its accidental appropriation or destruction. Still he has a voice in the audit, and can claim a scrutiny of the Putwaree's papers. It may so happen that the force or fraud of a part of the community or of an individual in it, has for a course of years kept some of the community from the audit. Such exclusion is fatal to the possession of the party. He is considered as dispossessed.

60th. In a community it must always happen that there are some members of superior intelligence or wealth who obtain a preponderance in the brotherhood. Where so much respect is attached to hereditary right, this influence often descends from father to son, although the descendant may not be distinguished by personal worth. The engagements with Government run in the names of these indivi-

duals, who are commonly styled *Lumberdars* (i. e. bearing the number in the Government Registers). These persons in many parts of the country arrogated to themselves the whole of the proprietary right, and imposing upon the ignorance of the European officers of the Government, succeeded in obtaining recognition of themselves as the owners or Zemindars of the estate, instead of mere managers on the part of the whole community. This however was less the case in Azimgurh than in the other neighbouring districts, especially in the province of Benares. The hereditary right of the managers had not become established, and it had been usual on re-settlement of the estate to alter the name of the manager, and sometimes to increase the number of managers. In the present settlement the question has been set at rest by the filing of an agreement entered into by the whole of the village community, declaring the office to be elective, not hereditary, and the incumbent to be liable to be ousted by the voices of the majority of the *Puttee* or *Thoke* he might represent, on proved mis-management.

61st. Still under any circumstances the audit of the accounts is the fertile source of discord in the community. The village expenses are primarily authorized by the *Lumberdars*, or managers, and as they frequently include fees or bribes to public officers, or other items utterly unsusceptible of proof, are regarded with a very jealous eye by those of the community who are not managers. The power which the Putwaree possesses of fomenting these discords is great, and frequently used in the most injurious manner. It remains to be proved by the result, how far the avowedly elective nature of the office will be now effectual to stifle these dissensions.

62nd. Although, however, the profits of the estate may be divided according to the Seer cultivation of the proprietors, it does not follow that the ancestral sharers are always lost sight of. Sometimes they are, and in such cases the only record of right consists in the *Secr*, which regulates not only the direct profits arising from cultivation, but also the *Sayer*, and other proprietary dues. Of this the best instances are Kotelah and Sirsal, and some other villages held by Mahomedan communities in Tuppah Phurchuk Havelee, in Pergunnah Nizamabad. The origin of these communities seems to be totally lost, probably they were originally Hindoo communities, and the genealogy was lost in the confusion which occurred when the Mahomedan faith was adopted.

63rd. In other class of cases the ancestral shares are known and recorded, but profits are still enjoyed according to the *Seer*. This no doubt has often resulted from over-assessment. When the demand

of the Government is excessive, the proprietors are compelled to throw their profits as cultivators into the common fund, and of course those who do not cultivate could not share the profits, whilst amongst the cultivators the profits would be made to correspond with the cultivation. Accordingly we find that since the cession, and especially lately, when the cultivated area, and consequent assets of the village, have increased without a correspondent increase of demand, many changes have taken place, and villages which formerly paid *Beegah dam* (i. e. by a rate on the Seer,) now pay *Khoo taitee* (i. e. according to ancestral shares.)

64th. In the large Rajpoot communities where the whole of the lands are Seer, though the ancestral rights are well known, yet the custom of paying according to the Seer prevails from another cause, viz. from the constant transfer of land or of shares (generally by mortgage, but sometimes by sale) which takes place amongst the several proprietors. The natural multiplication of some branches of the family of course reduces their shares to so small a fraction that some are obliged to seek other modes of subsistence, and leave their shares in the hands of the wealthier members of the family. In other cases, want or temporary distress induces the mortgage of part of the share. The mortgage generally conveys the land with its portion of the revenue. Instances where the land is mortgaged free of revenue are rare, and the periods of such mortgages are short, nor are they often made, except to regular money dealers, the security of course being bad, as it is liable to be endangered by default of the mortgager. Wherever transfers of this sort are paid amongst the members of the brotherhood, the effect is to lodge large portions of the village in the hands of the wealthier proprietors; and as the mortgages are often not reduced for a long series of years, or perhaps not at all, and are at length lost sight of, the ancestral shares cease to regulate the profits of the proprietors.

65th. I would here remark a curious distinction in these mortgages, which will often be found to afford the clue to disputes amongst the proprietors. Mortgages are either of specific fields, or of shares; the former are called *Khet khut*, the latter *Khoont khut*. A man in distress will mortgage away all his fields one after the other, and at last he makes over his share also; but this transfer, perhaps, carries no land with it. *Khet khut* does not impair the proprietary right of the mortgager, nor does it create any such right in the mortgagee; but the execution of *Khoont khut* at once terminates the connection of the mortgager with the village, and substitutes the mortgagee in his place. The *Khoont khut* probably conveys only a nominal right,

or at least only a right to some small item of Sayer, still it is given with great reluctance, and only under the sternest necessity, and on account of the higher value attached to the privileges it represents, may command a considerable sum.

66th. A similar distinction often exists in titles acquired otherwise than by mortgage. In the village of Burragoon, in Tuppah Chitpoor, Pergunnah Mahomedabad, there were two Puttees in one half of the villages, and only one in the other half. The owners of the latter found themselves numerically the weaker, and fearing that they might be overborne by the two Puttees, summoned a distant member of the family from a neighbouring village, gave him an interest in their half, and had his name inserted in the engagements with Government, together with the representative of their Puttee. There was much waste land in the village, and it was agreed that in each half the waste land was to be apportioned on the Seer of the proprietors. The stranger claimed his share, the owners of the one Puttee resisted it. On further inquiry it was discovered that the stranger had acquired a right to certain fields only, not to a share, he was an owner of *khet* not of *khoont*, and his claim of course fell to the ground. This is an instance of one of the modes, in which the practical bearing of the distinction develops itself.

67th. The mortgage bonds of this sort are frequently worded so as to be deeds of sale, and yet by common custom redemption is allowed. It is astonishing what good faith is generally observed among the members of the large Rajpoot communities regarding these mortgages. A member may have been absent for years, but when he returns to his village in circumstances admitting of the redemption of his share, a meeting of the community is held, his share is determined and given up to him, or the mortgaged fields traced out and restored. An attempt to resist any claim of this sort is highly reprobated amongst the Rajpoots, and indelibly fixes a stain upon the person who resists. Unfortunately the artificial system which is springing up under the influence of our Courts weakens and undermines this generous conduct. Supported by the strong arm of our civil power, a man will now venture to brave the hostility of a community, which in another state of Society, would summarily have enforced its own award.

68th. The man in possession is now supported by the Government till he is ejected by the decree of a Civil Court. The usual way of resisting claims of redemption is either by pleading actual sale, instead of mortgage, and taking shelter under the rule of limitation, which bars the admission of a claim after a certain period, or admit-

ting the mortgage, by bringing forward a long counter-statement of expenses incurred in maintaining possession of the mortgaged lands, or in cultivating them. This account may be swelled to a length far exceeding the value of the land, or the means of the mortgager, and he is at the same time tempted to bring forward a counter-claim for the refund of mesne profits. A case of this sort can only be settled by arbitration. In some parts of the district, as in Tuppahs Chowree and Koobah, Pergunnah Deogaon, the admitted custom is, that redemption takes place on payment of double the mortgage money, and here disputes of this sort are less liable to cause litigation. The village of Ailwul, held by a body of Bissen Rajpoots, which includes a part of the town of Azimgurh itself, is an instance of the ruin which disputes of this sort occasion. Two of the Puttees deserted the village during the oppressions of the period prior to the cession. After that they returned and reclaimed their shares. This was resisted by the remaining proprietor, who had borne all the difficulties which had led to the expulsion of his weaker brothers. The arbitrators absolutely, and free of expense, restored their shares to the claimants. A bloody affray ensued, and the subsequent bitter animosity between the parties compels the constant interference of a Suzawul on the part of the Government to collect the Jumma for the several individuals separately.

69th. The system of *Beegah-dam*, however, very frequently prevails in villages where the shares are the subject of dispute, and here the greatest animosity prevails. The lapse of a share by failure of issue, the conflicting claims of children by different mothers, and the irregular transfer by widows, who may retain the management of their husband's land, are amongst the fruitful sources of these dissensions. Here the contending parties dispute to the utmost the point of inherent right, and when driven from that, the predominant party fall back on the question of village custom; and dropping all mention of the manner in which they originally acquired their large portion of Seer, claim the maintenance of the custom which makes it the criterion of their interest in the village.

70th. The circumstances of Tolookah Sithwul, Tuppah Phurchuk Havelee, Pergunnah Nizamabad, so clearly illustrate many of the curious and difficult questions attending cases of this sort, that I cannot refrain from mentioning it somewhat in detail.

71st. This Talookah originally belonged to a family of Rajpoots, who are now represented by four branches. Between the years 1085 A. R. and 1130 A. R. (A. D. 1677-1722) they sold the estate to a Rancee of the reigning family at Azimgurh, who founded on it a Bazar, now called Rancee-ka-Serai. It was subsequently re-purchased

for 875 rupees by Tannee Rai, a distant relative of the proprietors, and a resident on the estate, but not himself an owner before that time. From the period of the purchase to the present day the descendants of Tannee Rai held with the heirs of the original proprietors, and all paid *Beegah-dam*, but till sometime after the cession, the family of Tannee Rai remained superior. About the year 1820, the descendants of one of the old branches sued for a quarter share of the estate, and on inspection of the genealogical tree, and a reference to the law officers of the Court, obtained a decree in their favor. In this suit the real question was never brought forward, nor the circumstances explained, under which the Tannee Rai branch was introduced. This decree was never executed, but at the time of settlement, the holders of the decree claimed execution of it from the officer who was conducting the proceedings. They were of course referred back to the Civil Court for an order on the Collector to give possession under the decree, and at the same time a proceeding was held, setting forth all the peculiar features of the case for the consideration of the Court. Now we are able to perceive in this particular case the origin of the tenure, and the means whereby a new branch was introduced amongst the community of proprietors, alien to the original stock, but still possessed of rights in reality far stronger than any of the others. The principle of the Civil Court's decision went to the exclusion of these, in fact, the rightful owners, and whose proprietary tenure had been sanctioned by the uninterrupted possession of upwards of 100 years. Similarly good reasons, no doubt, often exist, though the trace of them has been lost, for the numerous apparent anomalies, which exist in tenures of this description. The memory of the transaction had been maintained by its comparatively recent date, the high station of some of the parties concerned, and the existence of the Bazar, which was named in commemoration of it. Similar transactions which were not rendered equally illustrious, were doubtless often forgotten in the convulsions and revolutions of former times.

72nd. It is well to remark some of the incidents of this tenure, and the points wherein they vary from each other.

73rd. Sometimes the Sayer are divided according to hereditary shares, sometimes according to the Seer; the latter prevailing where the shares are acknowledged, the former where they are unknown.

74th. The sharers may themselves cultivate, or they may have the option of under-letting their Seer. This depends more than any thing else on the circumstances in life of the sharers. If they are respectable men, who do not cultivate themselves, or have other means of liveli-

hood, they are accustomed to under-let their Seer ; but not if they are themselves of the class of cultivators, and have no other means of occupation. In some instances each person pays the *bach*, upon his Seer, whether it be cultivated or not ; but in general he only pays upon what has been actually cultivated. The former custom is usual when the proprietor is at liberty to under-let his Seer.

75th. The managing proprietor, or Lumberdar of each Puttee, sometimes receives a fixed sum, or pecuniary allowance. This is the case in Sithwul, which has just been mentioned. Each manager there gets 25 Rupees, which is charged to the village expenses. Instances of this are at present rare, because the other unauthorized advantages possessed by the proprietor have generally caused the office to be much an object of desire ; now that the situation has become elective, and held only at the pleasure of the community, it is probable that it will more frequently be remunerated by money payments.

76th. Generally the Zemindars are not allowed to extend their Seer without the consent of the community, but where there is much culturable waste land attached to the village, or cultivators are scarce, the rules on this head are little attended to.

77th. In all villages or estates held by communities, exertions have been made in the present settlement to specify and place on record the several peculiarities and incidents of the tenure, which have been referred to above. The members of the community have been called upon voluntarily to define these in a joint deed, executed by as many members of the body as could conveniently be brought together. The points alluded to in these deeds, are the mode in which the profits of the estate are to be divided, and the rules regarding the enjoyment of the Sayer, the cultivation of waste land, the management of Seer land, the rights, privileges, power and tenure of Lumberdars, or managing proprietors. As far as practicable, whenever a desire to that effect has been expressed, the non-proprietary cultivators and the waste land have been divided amongst the several sharers or families of sharers, so that whilst the joint responsibility is maintained, there still exists the greatest encouragement for the improvement of each several share.

78th. I have thus attempted to describe the principal sort of proprietary tenures ; but before proceeding to any other branch of the subject, would briefly notice the topographical distribution of property which prevails in different parts of this district, and mention the mode in which the settlement proceedings bear in this respect on the state of property.

79th. The simplest form of an estate is, where an individual,

or community of individuals own the whole of a plat of ground lying within certain limits, and bearing a fixed name, as a Mouzah. This may from time immemorial have borne a single name, and be generally recognized as such, or it may contain within its area two or more Mouzahs, Uslee or Dakhulee, or both, whose separate boundaries have long been lost sight of, and which have become intermingled so as to form one village, probably bearing the double name.

80th. The estate however may comprise two or more such Mouzahs, and these may be situated together or at a distance from each other.

81st. The ancestors of many of the Rajpoot communities were possessed of large tracts of land containing many villages. As their descendants multiplied, this tract of land was subdivided, and formed into separate Mehals. This subdivision sometimes was effected so as to assign whole Mouzahs to different branches of the family. It was seldom, however, especially when the subdivision was amongst many sharers, that the property could be so divided. In this case, perhaps, some entire Mouzahs were given to each branch of the family, and the inequalities thence arising were made good in the division of some Mouzahs held jointly by all, or else each Mouzah was divided so that every branch of the family should have a portion. The whole Mouzahs, or portions of Mouzahs, belonging to each branch, were collected together, and made into one Mehal, or estate. But in the Mouzahs held jointly, the division probably was not in distinct portions, but field by field, or as it is commonly called, *Khet Bhut*. Now these fields sometimes became the subject of sale from one person to another, and the purchaser might call the purchased field by the name of his own Mouzah. It thus happens that many Mouzahs in Tuppah Chowree, Pergunnah Deogaon, contain within them fields known by the name of other Mouzahs, perhaps two or three miles distant, and have attached to them fields in other Mouzahs at an equally great distance. In Tuppah Koobah, Pergunnah Deogaon, the case was still more involved by the circumstance, that sets of fields in several Mouzahs, belonging to different branches of the family, bore distinct names. This distinction existed sometimes in the Government records, and not in common usage, sometimes in both.

82nd. Now in all cases of this sort, the system of survey which has been followed is the most convenient which could have been devised. The professional survey gives the locality of the villages, or of the plots of ground constituting the site and the bulk of the village, whilst the native field maps give the several fields within the circuit of each village. These fields can be distinguished by different colors

according to the different Mehals to which they are attached ; and the fair proportion of Jumma allotted to the Mouzah, may be readily assigned to each field, or knot of fields. The fragments of villages thus assessed may be grouped together in Mehals, so as to suit general convenience, and without any trouble to the revenue officers of the Government, or any risk to the interests of the Government.

83rd. It may be useful to attempt a definition of these two terms, a *Mouzah*, or village, and a *Mehal*, or estate.

84th. A *Mouzah*, or village, is one or more parcels of land called by a certain name, of fixed limits, and known locality, neither of which are liable to change. At the time of settlement, each Mouzah has a name and number assigned to it in the Government lists, and must so remain till the ensuing settlement, or till, for any special reason, it should appear fit, under express orders from the Government, to break up or alter the arrangement of the Mouzahs.

85th. A *Mehal*, or estate, consists of one or more Mouzahs, or a part or parts of one or more Mouzahs, covered by one engagement with the Government, or *Durkhaust*, and belonging to one individual or body of persons, who are jointly responsible for the Jumma assessed upon the whole. These are liable to constant variations, according as transfers of property may take place. An annual adjustment of Mehals at the time of making up the annual *kistbundee* if done with discretion, and under certain precautions, will be found very conducive to the comfort of the people, and the convenience of the Government officer.

86th. I would now proceed to notice the right possessed by non-proprietary cultivators, i. e. cultivators not under engagements with the Government themselves, or through their representative.

V, p. 23, Gov.
Genl's minute of
Sept. 26, 1833.

These may be divided into,
First,—Those having an hereditary and transferable right to hold their land at a fixed rate.

Second.—Those having a right of occupancy at a fixed rate, either for a certain period or during their own lives, or those of their immediate descendants.

Thirdly,—Mere tenants at will.

87th. Under the first term I would include all holders of resumed *Maaffees*, with whom such an arrangement has been expressly concluded by the Collector at the time of settlement, and generally those who by purchase, gift, or special compact, have obtained rights of this nature from the Zemindars, such as Bisweedars, Sunkullupdars, the holders of land at reduced rates, or rent free, as security for loans, the holders of land on special terms in lieu of proprietary claims on the estate. These persons may be, as it happens, themselves cultivators or

may have cultivators under them. At the time of settlement the extent of land held by them, and the conditions of their tenure, have been clearly recorded. The proprietor is of course responsible to the Government for the Jumma fairly assignable to their holding, but he may sue them summarily for the amount, and on failure of payment may oust them or bring their tenures to sale. It may happen, and it frequently does happen, especially in Talookahs, that a whole Mouzah may thus be held as an under tenure by the old proprietors, who are responsible to the Talookdar and not to the Government, and who yet may manage the village concerns according to established custom as a proprietary body. The provisions of Act VIII. of 1835, which authorizes the sale of under tenures of this sort, on failure to pay the amount decreed in a summary suit, afford considerable facilities for the realization of the rents from tenures of this description.

88th. In the second class may be placed the former proprietors of estates sold by auction for arrears of rent, as regarded their Scer land—ousted proprietors, or old claimants of proprietary right, as regards the land they have long had in possession, and generally those who, whether actually resident in the village, or otherwise, may be proved to have long held the same land on the same terms for a course of years. The period which constitutes such prescriptive right has been no where settled. It has been held, that land so possessed since the cession may come within this class. A shorter period however might fairly be assigned, and probably the Civil Courts would recognize the term of twelve years as sufficient to constitute the claim. It is not unfrequently the case that tenures of this sort originate in contracts entered into by the Zemindars themselves, with cultivators whom they may engage to bring waste land into tillage.

89th. Now it is evident that all tenures of this kind are liable to adjustment at the time of settlement. No proprietor is at liberty to fix rates which should hold good beyond the term of his own tenure, or lease, nor would the settling officer be justified in recognizing rates which fall below the average of the Government demand, or the fair proportion of assessment which may be levied from the fields in question. It is sufficient that the fair rate fixed at the time of settlement should be invariable during its duration, and that the extent of land thus held, with the rate and right of permanency, should be clearly defined. Of course if the holders of this land extend their cultivation, and take other fields than those which they are recorded to possess, they do not carry their privileges with them, but must make their own terms with the Zemindars for their new requisitions.

90th. The most perplexing cases of this sort which are likely to

occur, have reference to estates formerly held by large bodies of cultivating proprietors, which are brought to public sale for arrears of Government revenue. In such cases it is only the proprietary right of the defaulters which is extinguished, their rights as cultivators remain intact. They are still entitled to cultivate their Seer land at a fixed rate, but the rate requires to be defined. Before the present settlement there was the greatest difficulty in deciding cases of this sort. The Putwaree's papers, supposing them perfectly genuine, show only the extent of each Zemindar's Seer and the *bach*,^h he had hitherto paid. But the extent was stated in an arbitrary Beegah, commonly called the Bhaiunsee Beegah, much larger than the ordinary standard Beegah, being used only amongst the brotherhood, where relative and not absolute area was the only requisite. In order then fairly to fix rates for the Seer land, it was requisite that the auction purchaser should first measure the land, and then determine the average rates which were paid by other cultivators for similar land. It was seldom, in former times, that auction purchasers were able to accomplish this. Any attempt to measure the lands of a turbulent village community would have inevitably led to a breach of the peace and bloodshed, and the loss to the proprietor would have been immense. The matter used generally to end in a compromise, which of course was more or less favorable to the purchaser according to the strength or influence of the two parties. The rate once fixed, and in general it was a very low one, the efforts of the old proprietors were always directed to including in their Seer the best, and richest Ryottee land. Hence the rental was soon reduced so low as to yield no profit to the Zemindar, and ultimately, in all probability, the estate was returned on the hands of Government as over-assessed. No other purchaser would of course come forward, a Government Suzawul was helpless, and unless some great exertions were made by the officers of Government, the deterioration of the estate was permanent.

91st. Talookah Oonhaitch, formerly included in Pergunnah Puchotur, Zillah Ghazeepoor, illustrates the process. It was permanently settled in 1197 F., but broke down in 1223, and for many years had been held *kham* by Government at a considerable annual loss. It has now been re-settled with the former village communities at the old Jumma, and arrangements made with the proprietors for the repayment of the balances by instalments within twenty years. The Jumma, and the instalments have now been regularly paid two years, without the smallest default. The estate has since been transferred to Azingurh, and forms part of Tuppah Purduha, Pergunnah Mahomedabad.

92nd. The case under the new settlement will be very different. In all estates held by cultivating bodies of proprietors, the custom of *bach*, only is recorded regarding the Seer. There is no necessity for vexing or alarming the proprietors by fixing Ryottee rates on their Seer. If therefore the estate be brought to sale by public auction, there will not be found any rates fixed on the Seer. But still its extent and locality will be certain, and the rates paid by other cultivators of similar rank in life for similar land will be found recorded. There are generally in Azimgurh two rates of rent for the same land, varying according to the rank in life of the cultivators. The respectable, or *Ushraf*, pay less than the lower classes, or *Urzal*. The Zemindars would of course pay the *Ushraf* rates.

93rd. The cause or origin of this distinction is not very clear, but reasons may be alleged in its justification. The *Ushraf* are generally Brahmins or Rajpoots, who are connected with the Zemindars by ties of religion, family connexion, or friendship, and hence are somewhat favored; besides which their respectability gives better security for payment. On the other hand, the *Urzal*, consist of Bhurs, Chumars, and low caste persons, who are generally located on the estate at some expense of capital, and are liable at any time to be left entirely dependant on the Zemindars, who must either support them during a season of scarcity or see his estate depopulated, and his future sources of profit destroyed.

94th. The third class, or tenants at will, consist mostly of those who are styled *Urzal* in the preceding paragraph. They neither have nor assert in general any rights, other than the will of the Zemindar. They take what land he gives them, and pay the utmost that they can, either in money or in kind. Besides their direct contributions to his rental, they render him many personal services. If Kuhars, they carry his palankeen, merely receiving in return food to support them during the time. Other classes bring him wood, tend his cattle, or perform numerous other similar services for very inadequate remuneration. Under former Governments this power was no doubt recognized, and permitted. They were then predial slaves, who were beaten without mercy for misconduct, and were liable to be pursued, and brought back if they attempted to escape. Their state is now much improved. The power is now conventional. A Chumar can now sue his Zemindar in the Criminal Court for an assault, and if detained against his will, can bring his action for false imprisonment. He can even recover in a Civil Court the wages of labor performed. Nothing vexes or annoys the Zemindars in our whole system, so much as this. It has struck at the root of a power, which has long

been exercised most tyrannically, and yet so strong is the force of habit and custom, that often as the power of the Zemindar is still abused, it is very rarely that they are brought into Court to answer for their misconduct.

95th. The foundation on which the right of the Zemindar now avowedly rests, is that of pecuniary obligation. He expends capital in locating the cultivator in the village, he builds his house, feeds him till the harvest time, supplies him with seed, grain, and implements of husbandry. On all these, an exorbitant interest is charged, and in consideration of the pecuniary obligation thus incurred, the services of the man are exacted. Hence the connexion is rather personal than resulting from the tenure of the land, and various circumstances support this view. In mortgages those rights are seldom, if ever, transferred; in private sales very rarely, unless specified; in public sales by authority for arrears of revenue, never. Hence an auction purchaser never acquires any rights over the tenants at will of a former Zemindar, and thus the Zemindar always struggles to include all such cultivation under the term of his Seer. In the partition of an estate, each Puttee keeps its own Ryots, and sometimes the most violent disputes exist as to the right to certain Ryots.

96th. An instance may go far towards exemplifying these customs. In the partition of a village in Nizamabad, held by Rajpoots a dispute arose regarding the right to an Aheer. Each party claimed the man as his own Assamee, and wished his name to be inserted in the list of his own Puttee. Both claimants, and the man himself came forward. The facts of the case were admitted by all. A's ancestors had first located the man in the village, given him his house, supported him, and for a long time retained his services—such as the first day's ploughing of the season, the first day's use of his bullocks in the Sugar Mill, the usual petty offerings of grain, molasses, &c. To improve his cultivation the man had dug a well, for which purpose he borrowed money from a Mahajun. A, was in reduced circumstances, and could not pay the debt. The creditor pressed for payment, and at last B came forward, paid the debt, and subsequently claimed the services of the man, who now left his former house, and resided in one assigned him by B. The man himself, apparently a respectable and sensible cultivator, never thought of denying the obligations of his situation, but said that on A's inability to support him his services were transferred to B. The matter was referred to several respectable Zemindars, who were present, and they unanimously and at once decided that A's right was indefeasible, except by his own transfer to B, and that the Aheer was consequently still bound to

render as before all the usual service to A, whilst B might claim in liquidation of the new debt, whatever else the Aheer might be able to do. This decision was communicated to the parties; the Aheer was registered as A's Assamee, and all parties went away apparently satisfied that the case had been fully heard.

97th. There are however many varieties of this class. In proportion as they are good cultivators, and raised above the menial castes, they acquire by prescription, rights which at length become valuable. The Keorees are an instance of this. They are by far the best cultivators, and they excel in gardening. A Zemindar is always glad to get some of them located in his village. He treats them liberally, because they improve the ground by constantly manuring it, and pay him high rates, and that punctually. Hence their cultivation is never interfered with. They get as much as they like, and are allowed to keep it as long as they will. The self-interest of the Zemindars would always be sufficient to protect them, except against sallies of passion. Lately however the independance of this class has been established by the rapid spread of Poppy cultivation in the district. The Keorees are the only class of people who will produce Opium. By taking advances from the Opium Department, and putting themselves under the protection of that powerful establishment, they have quite freed themselves from any dependance on the Zemindars. It is needless to say, that nothing is consequently more odious to the opulent and powerful Zemindars than this Department.

98th. It is clear that non-proprietary cultivators of this third class by long prescription would rise to the second class, and acquire the right of holding their land at fixed rates.

99th. The better to define and secure these rights, it has been one great object of the settlement proceedings to form an accurate record of each of these classes, according to their several designations. In the two first classes, the extent of their cultivation and rate of payment has been determined; and in the third, the land actually held, and the rate actually paid recorded; this rental thus formed by the village Putwaree, in the presence of as many members of the community as may be on the spot, has been afterwards advertized for information in the village, and at the place where it was drawn out, a time fixed for hearing objections, and at the close of that time, the question has been finally disposed of. Whenever the prevailing rates may have been reduced below the fair Pergunnah average, from collusion, partiality, by special contract, or other cause, it has been sometimes necessary to re-adjust and fix the rates, which may be hereafter demanded.

100th. The future maintenance of those arrangements must be left to

the Courts of Law, but it is well to see how the present practice of the Courts affects them. Summary suits for rent will be decided according to these rates, unless proof be adduced that they have been set aside by the Dewanny Courts, or altered by voluntary agreement; and such voluntary agreement should never be admitted on the denial of either party, except under the clearest documentary proof, or alteration of the rates previously made by both parties in the register of the village. Any cultivator forcibly dispossessed of the land he holds, according to the register, might sue summarily before the Collector for re-instatement, to whatever class he might belong, and would be re-instated accordingly. A summary process is provided to maintain a cultivator in possession against his Zemindar, but no summary process for ejecting a tenant at will is open to the Zemindar. If any Ryot fails immediately to liquidate a demand for rent, adjudged against him in a summary process by the revenue authorities, he is liable to ejectment, and his land is then made over to the Zemindar. Tenants at will seldom resist the requisitions of those who are really their Zemindars, that is, who claim the supremacy which has been before described; but few would yield up their possession in favor of an auction purchaser. In such cases, then, although the Zemindar possesses legally the right of ousting the tenant at will, he can only legally enforce it through a regular suit. The Courts also can of course always take cognizance of claims to be removed from one class of cultivators to another. It is however very questionable how far they could interfere in altering the rates fixed by the revenue officer, unless on pleas originating subsequently to the settlement. They could at least only take cognizance of the question as between man and man, between the Zemindar and the Ryot, as it might be affected by contracts existing between them. They could not positively alter any rate fixed by the Collector. If the estate were held *kham*, or farmed, or sold by the Government in consequence of default, the settlement rates might be demanded, notwithstanding the decree of the Court. If this were not the case, the rental might be reduced below the Government demand, and the interference of the Civil Courts might be thus exercised in regulating the Jumma, which it is an established principle that they have no power to call in question.

101st. If it were desired to introduce the European system of farming, or, in Indian parlance, to make the whole lands of the village Seer, this could only be effected by purchasing up the rights of the two first classes, and by purchasing out, or ejecting, the last class, probably by long and expensive litigation. The insuperable aversion

which the upper classes (*Ushraf*) have to engage with their own hands in any agricultural operations, would render it very difficult to persuade them to part with their rights.

102nd. It is necessary to allude here to the great number of summary suits regarding the payment of rent, which are instituted in this district. The number is still increasing, and the causes

Number of Suits instituted in the three first quarters of 1823—

1833— 617

1834— 358

1835— 675

1836— 882

1837—135

which have produced so much litigation deserve note.

First,—The operations of the Special Commission under Regulation I, 1821, and I, 1823, for the reversal of fraudulent sales, and transfers of property; was one of the chief causes. In the

early period of our rule the district suffered exceedingly from the effects of our Code. This was hastily introduced, immediately on the cession, and gave a rich harvest to numerous intriguers, who poured in from the neighbouring districts which had been longer under our rule, and were better accustomed to the tricks and chicanery, which an artificial system of the sort is likely to produce amongst an illiterate people. The choice too of some of the first agents for introducing the new system appears to have been unfortunate. The natural result was, that extensive frauds were perpetrated both in the registration of owners of estates at the time of the first settlement, and subsequently in the transfer of property under forced and collusive sales. To remedy this state of things was highly desirable, and the remedy ought to have been promptly administered immediately the evil was discovered. As it turned out, the attempted remedy was almost worse than the evil.

103rd. In 1829, that is, twenty-six years after the commencement of the evil, the Commission was called into operation in the district. Its conduct was entrusted to Mr. R. M. Bird, the Commissioner of Revenue and Circuit for the division, who was perfectly aware of the necessity, and importance of the measure. The Regulations quoted above confer an immense discretionary power, and admit of great latitude of interpretation. Mr. Bird commenced the work with energy, and began to act on the strong views he justly entertained upon the subject. Had these views been then carried through with promptitude and decision, great good might have resulted. An immense number of suits were immediately instituted, but in the mean time a change had taken place in the views of the superior authorities on the subject of this Commission. Some of the first cases decided by Mr. Bird gave rise to much discussion, and were reversed in appeal. No further decisions were passed, and the time of the

Commissioners was speedily so completely occupied with their other duties, that the investigations lay thus in abeyance for seven years, till in 1835 a separate officer was appointed to close the investigations. When this took place, the views which led to the original enactment, had become completely altered, and all the claims which had been kept alive for seven or eight years, were speedily thrown out. In addition to this, the appellate authority, as well as the primary, had become clogged and overwhelmed, till about the same period a special provision was made for the discharge of its functions. Hence many of the claims which had been allowed by the Special Commissioner in the early part of the period between 1829 and 1836, and the parties put in possession accordingly, were disallowed in appeal at the close of the period, and the decree holders again dispossessed, and made to account for mesne profits.

104th. Amongst a people extremely sensitive regarding their rights in landed property, it may well be conceived what injury resulted from operations such as these. It is unnecessary to notice here the evil effects upon the prosperity and morals of the people. Its effect in all estates which had been purchased at public auction for arrears of public revenue (and very numerous they were) shewed itself in the refusal of the members of the old village communities to pay their rents. Hence the proprietor of such an estate was sometimes compelled to file sixty or seventy suits in a single village or Mehal.

105th. *Secondly*,—By far the larger number of suits were instituted in Pergunnah Nizamabad, and many of these resulted from the fiscal mismanagement of the Pergunnah whilst under settlement, from 1822 to 1834. It was the field where every young and inexperienced officer began to make settlements, or to introduce a new system, and hence was the subject of many crude and rash experiments. Amongst these was the arbitrary fixing of rent rates, from which the Government demand was deducted. In proceedings under Reg. vii, 1822, this was frequently done, and with the most injurious effect. The arbitrary rates could often not be exacted, but they gave the Malgoozar a pretext for demanding them, and consequently involved him in litigation.

106th. *Thirdly*,—The very unsettled state of the landed property was another fruitful source of litigation. Disputes regarding boundaries, and between Putteedars, were constantly thrown into the summary suit file.

107th. *Fourthly*,—But all these causes were ten-fold magnified by the delay which used to occur in the decision of these suits, then falsely called summary. Till the Sudder Board of Revenue took up the subject in 1833 with their wonted energy, suits of this sort used to

remain on the file ten years or more. When the Civil Courts had the charge of the summary file, very few decisions were ever passed, and these few were based on no fixed principles. Contumacious cultivators derided the efforts of the proprietor to compel payment by the institution of summary suits, whilst these were still placed on the file by the disheartened proprietors, lest failure to assert the claim might have compelled reference to a regular suit, which seemed more expensive and still more hopeless of speedy termination.

108th. A recourse to distress and sale of personal property of the tenant was equally fruitless, replevin immediately took place, and further proceeding was stopped till that could be disposed of.

109th. A very different state of things has followed close upon this. Within the last three years summary suits have been decided and enforced, through the agency of the Tuhsildars, with a promptitude never known before. A month or six weeks is the average duration of a suit, and none lie over for more than three months, whilst the Cutcherry of the Tuhsildar is a tribunal at the door of every man. In the mean time, the Special Commission has nearly closed its course, rent rates have been adjusted, and boundary and Putteedar disputes settled. It must also be remembered that the division of property is very minute, the number of subordinate tenures large, and that every effort has been used to induce the Malgoozars to have recourse to summary suits, instead of relying on the irregular and illegal interference which used to be exercised by the Tuhsildars in the adjustment of their Putteedaree disputes, and collection of their rents. When all these things are taken into consideration, it will not perhaps be considered strange that the summary suit file is heavy. It will rather be thought a happy proof of the efficiency of the process, and a sure indication that regularity and legal modes of redress are rapidly taking the place of confusion and misrule.

110th. The state of the rent free lands requires some notice. All the claims to hold land free from the payment of revenue have been investigated and finally disposed of. The quantity resumed and settled is very large. This consisted mostly of unauthorized grants by Amils, or Tuhsildars, or Zemindars, in which the original grantee, however, had generally demised, and the property had devolved upon the heir, contrary even to the terms of the grants. A large portion of the grants had conveyed tracts of waste land which had been brought into cultivation after the commencement of our rule.

111th. An uniform principle regulated the settlement of all these tenures. Possession and the actual state of things was maintained so far as it was unaffected by the assertion of the right of the Govern-

ment to its share of the produce. If any other than the Maafedar was in possession of the Zemindarry, i. e. the proprietary right, the settlement was made with him. If the Maafedar had obtained the Zemindarry right by legal transfer or by prescription, the settlement was made with him. If he had not obtained the Zemindarry, but seemed to possess other rights as an under tenant or cultivator, those rights were secured to him on easy terms, and he was protected from any encroachment on the part of the Zemindar, so long as he faithfully performed his part of the contract.

112th. A few tenures were confirmed for life, or in perpetuity. The latter are old religious endowments, which appear to have been held from time immemorial, and to have been respected by all.

113th. The settlement of this province for twenty years has been formed in the seasons 1833-34 to 1856-7, and extends according to the year in which each settlement was formed from A. F. 1241 to 1264. In all, the settlement has been conducted professedly under the system generally designated as that of Regulation ix, 1833. The adjudication and demarcation of village boundaries prior to survey, the measurement both by Ameens and by professional Surveyors, the determination of the Government demand from general considerations of former fiscal history, and comparison with other neighbouring and similar villages, without a minute scrutiny into the assets of each estate, and the subsequent record of proprietary rights and rent rates, are the main features of the system. In particular cases the system may have been a little deviated from, as will hereafter appear, but this arose from peculiar circumstances.

114th. The former assessment was in general light. The country was imperfectly cultivated. There had been no settlement since 1220 r. and subsequent to that period much waste land has been brought into cultivation. There was therefore less caution necessary in fixing the Government demand than where the assessment had formerly been overstrained, and large reductions were called for.

115th. Very few instances of recusance on the part of the Zemindars ever occurred. It is true that the average of the assessment on the cultivated land is not low, but it must be remembered that the land is very valuable, and pays rates generally much higher than elsewhere. Sugar, Indigo, and Opium are the crops which bring the greatest pecuniary return, and it is satisfactory to bear in mind that the rates were assumed about 1833-34, when all these products were in less demand than general. The advances of the Government for Sugar had ceased a little before that period, and materially deranged the market for that article. The failure of the agency houses in Calcutta

had depressed the Indigo market, and the cultivation of Opium even now is less extended than it might be.

116th. The chief labor of the settlement consisted in the difficulty of deciding the numerous boundary disputes, and fixing the relations between the proprietors amongst themselves, or the proprietors on one hand, and the numerous subordinate tenants on the other. The whole area of 2,121 square miles is parcelled out into 5,541 villages, which gives an average of less than 245 acres to each village. When we advert to the former state of this district, and the rapidity with which it has been in our hands, it is not surprizing that numerous disputes should exist between the different villages. The adjudication of these had never yet been attempted on any uniform plan, and it was a task of no small difficulty, in many cases, to reconcile or give effect to the different decisions which had been formerly given; voluntary arbitration between the parties was the means generally employed for determining the boundary, but where the parties would not arbitrate of their own accord, persons were appointed by lot, under the established mode, to settle the dispute.

117th. I cannot say that I contemplate with satisfaction the mode in which this duty has been performed. Too much was left to private arbitration, and the awards thus given were too strictly followed. The venality of the arbitrators became at length notorious, and there were some, who were known to have amassed large sums in this method. When the work was nearly completed, all persons were convinced that the preferable method was to refer as little as possible to arbitration, and in the cases which were so decided, to tie down the arbitrators within the narrowest limits, and to insist upon a prompt decision in the immediate presence of the superintending officer. This plan was pursued very successfully after the completion of the unsettled portion of the district, in the permanently settled Pergunnah of Secunderpore.

118th. Whatever may be the defects of these operations, it is however certain that the amount of good has been enormous, and quite throws the other into the shade. Possession has been scrupulously upheld, so that the main injustice which could ever be inflicted was to transfer more or less of the culturable waste between two interjacent villages to one or the other. To this waste it was seldom that any title could be made good. By no other plan than that prescribed by the system of settlement could these have been ever brought to adjudication. They have now been all decided, marked off, and a record of the boundary formed both by native Ameens in a rough manner, and by professional Surveyors, on scientific principles. It is scarcely

possible hereafter to conceive that any doubt should exist as to the decision, and the real position of the boundary. One cannot but regret that the agents employed in these operations should often have been false and corrupt ; but there can be no doubt ; that any attempt now to revise these proceedings, or any failure of decision in supporting the demarcation now made, would be attended with the greatest possible evil, and throw the whole district into confusion.

119th. The only authority competent in any way to alter the decisions already given, is the Civil Court in a regular decision. The Courts will now have each case clearly before them, and every possible light will be thrown on its merits. The sound rule to lay down is, that every decision must be confirmed, unless it can be proved that it was unjust, and the right to another boundary established. If this rule be strictly followed, no evil will result.

120th. One great advantage of the system is, that the district is twice visited by the revenue authorities, once before survey, to settle the boundaries, and again after survey to fix the Government demand. The latter is a valuable opportunity to inquire into any cases of alleged hardship or injustice, which occurred in the former operations. This has been always done. The officer who came on the second occasion to form the settlement, was generally of superior experience to the officers employed on the former occasion, and the opportunity seized to examine the former decisions. I can confidently say that no cases have been left, where the correction of apparent partiality would not have violated some important principle, which could not, according to the spirit of the law, or the dictates of sound policy, be shaken without very injurious results.

121st. The adjustment of the right of co-parceners and of the rates payable to them by non-proprietary cultivators, has also been a work of great labor. It has been much increased by the expression of a general wish on the part of the people, subsequently to the settlement, to have their shares in the estate separated, both in the cultivated and culturable parts. This has been very generally done at their own expense, towards which they readily contributed. In such an event, the village has been remeasured ; the holding of each person distinguished by a peculiar colour ; and new *Khusreh Khuteonee* and *Terij* formed accordingly. Nothing, I believe, has given more satisfaction in the district, or tended more to the security of property, than the way in which this operation has generally been performed.

122nd. The incidental advantages arising out of the present settlement, and the other operations which have been conducted to a close during its progress, may be thus enumerated :—

123rd. The formation of an accurate map of the whole district has enabled the local authorities to fix a regular boundary with the neighbouring districts, and to determine the limits of the several Pergunnahs, Tehsildaries and Thannah jurisdictions. The greatest possible efficiency has thus been given to the several establishments, and the comfort of the people greatly consulted. The statements inserted after paragraph 5 present a complete view of the organization of the Mofussil establishments of Revenue and Police, which has been thus effected.

124th. The accounts of each village with the Government were adjusted at the time of settlement. Arrangements were made for the liquidation of any outstanding balance of land revenue, or *tuccance*, or the remission of the demand determined. The items in deposit regarding the village were examined, and either refunded, carried to the account of Government, or otherwise disposed of, as was necessary. The several items standing under the head of law charges, and arising out of previous litigation between the Government officers and the different villages were adjusted. The confusion into which the accounts had fallen, rendered the careful execution of a work like this, at such a period, important in its financial results, and a great accommodation to the people. At the same time it tended to bring more completely before the settlement officers several considerations which were essential to the formation of a right estimate of the capabilities of each village.

125th. The arrangement of villages at the time of settlement, made after the limits of the district and its several subdivisions had been fixed, as shewn in the general statements furnished with the report on each Pergunnah, has also been the basis of a system of registry and record for the whole district. The Pergunnah number attached to each village in the general statement, is the same that is borne by the bundle in the Record Office, which contains all the proceedings that have reference to that village. The lists attached to these bundles are, in fact, registers of all the transactions that have affected each village.

126th. Having thus sketched the general operations pursued in the district, it will be of some practical use to notice the particular degree or method in which they were carried into execution in each Pergunnah. I will endeavour to do this faithfully and impartially, with all the light which subsequent experience has thrown on the earlier operations in the district.

127th. Pergunnah Nizamabad is the largest and most important in the district. It was first selected for settlement soon after the passing of Reg. vii, 1822, and was the field where every young officer

first attempted to make settlements, and obtained his experience. The results, as might be expected, were very incongruous. In 1833-4-5 all these operations were recast on the model adopted on Reg. ix, 1833. The professional survey was conducted by Capt. Simmonds, whilst the field measurement, where it had not been already completed, was conducted by the revenue authorities. One great evil of this was, that the revenue survey, especially on its first commencement in 1833-4, was far from correct. The interior survey, especially, was often considerably in excess of the truth, as is always likely to be the case, when it is not checked by the native field measurements. The culturable land was also given considerably in excess, from an opinion held by the surveyor, that all the land which would produce any thing whatever should be classed under this head.

128th. In estimating the settlement, advertence must always be had to the mode in which the "general statement in acres" was from necessity drawn out, and the averages there exhibited.

129th. The cultivated area was always taken from the measurement on which the settlement was formed. This was frequently many years previous to the professional survey, and exhibited a much smaller cultivated area than was found to exist at the time the settlement was prolonged for the extended period from 1241 to 1262. The prolongation of the settlement was partly thus determined on considerations, which, although they may have influenced the first settlement, were not the foundation of it. The total of the cultivated area there exhibited in the general statement is considerably less than the survey gives, and also below the fact. This of course makes the average rate of assessment higher than it would otherwise have been. The total area was necessarily taken from the survey returns, which were undoubtedly under this head correct.

130th. The diversity of plan and of persons who had conducted the operations in this Pergunnah, produced its natural effect in great inequality of assessment. In the remarks I have made on the errors of inexperienced officers, I by no means except myself from the number. On first joining the district in 1833, with no previous revenue experience, I found the Pergunnah distracted, and almost ruined by the mal-administration of the preceding ten years. Large balances accrued annually, not from over-assessment, but from unadjusted rights and disputed claims. Affrays frequently occurred, from ill-defined boundaries. There were numerous unadjusted claims, and every thing pointed out a state of considerable disorganization. It became an object of great importance to terminate this state of things as soon as possible. At the close of the year the revenue survey commenced, and did

not terminate its operations in the Pergunnah till the end of the next season. It thus happened that this was the first part of the district prepared for settlement, and in addition to the other causes which urged a speedy termination of the settlement, it became necessary at once to enter on the revision and completion of the operations here, or to remain unoccupied. The settlement was completed and reported in the middle of 1835. Two years' experience since then has convinced me that some of the assessments are higher than they ought to have been. Some of the errors were those of my predecessors, which I left uncorrected; some my own, into which I was betrayed either by erroneous surveys, or by the partial assumption and application of averages. I think, however, that these cases are few. During the two years above alluded to, a Jumma of nearly three lacs has been collected, with a real balance of only one or two hundred rupees at the close of the year. Even this has been realized soon after; and in addition, large sums have been collected in each year, the balance of former years. In one instance, a small village was sold for its arrear and fetched a good price, and in another a farming arrangement was made for the share of a defaulter. Both these cases were peculiar, and with exception to them, the whole has been collected by the ordinary methods. Imprisonment of the person, and distress of personal property, have been very rarely resorted to. It is probable that so long as the present high prices of Sugar are maintained, and the demand for Indigo and Opium remain what they are now, little difficulty will be experienced in collecting the revenue during ordinary seasons. Any failure, however, of these sources of profit, or adverse seasons, will probably throw some of the villages, for a time at least, on the hands of Government. It was for some time a question in my own mind, whether I should propose a reduction of the Jumma on a few estates. The remission of 2 or 3,000 rupees on ten or eleven villages would have been all that was required. But after consulting with the most intelligent natives in the district, it seemed best to avoid shaking the confidence of the people in their settlement, or to check the efforts they were rapidly making to improve their estates by extending the cultivation, or increasing the means of irrigation. If the opinion had once prevailed, that default and reluctance to pay might produce a reduction of assessment, these industrious habits would have been checked, and many estates have been injured at a small advantage to a few. The operation too of this principle would have probably been felt in other Pergunnahs where no such inequality existed.

131st. The confusion in this Pergunnah was not confined to the assessment. The demarcation of boundaries was also attended here

with far more difficulty than elsewhere; it had previously been the custom to measure the village before the boundaries were fixed. This pernicious practice had given rise to endless intrigues and chicanery on the part of the native Ameens. The lands of one village had sometimes been measured, or rather the measurement inserted in the papers of another village, and the settlement formed on this measurement. It hence became often necessary before the demarcation of a boundary, to examine many previous proceedings, and refer to voluminous documents. This, and the habit of intrigue and litigation, which it had fostered amongst the people, rendered the work very tedious and difficult. I fear that in some cases knavery and corruption obtained their ends, and I know not how this could have been avoided. But in every case, a clear decision has been given, a good demarcation on the ground has been made, and a record of the boundary has been formed. The value of this can only be known to those who were acquainted with the previous state of things. It has already in many cases of itself altered the face of the country, and saved many persons from ruin.

132nd. The imperfections of the boundary work in some degree affect the value of the survey, at least in the eastern and southern portions of the Pergunnah, which were surveyed in the first season. The professional survey cannot be there taken as an infallible indication of the boundary, but references must also be had to other documents put up with the proceedings in each case. In the western and northern parts, which were surveyed in the second season, there is little or no fear of error.

133rd. The same imperfections which adhered to the other parts of this settlement, exist also in the record of the fractional shares of proprietors, and in the adjustment of the rent rates. In the previous settlements it had been usual to express the hereditary rights of the proprietors in fractions of a rupee, without ascertaining whether their actual interests in the State did, or ought to correspond with them. Arbitrary rates were also frequently fixed, which never could be paid. Great progress was made by myself in correcting these irregularities, and amending the records. Mr. Montgomery has since been actively employed in the same way, and I trust that all material defects have already been remedied, or will be soon.

134th. The circumstances of Cheriakote and Keriak Mittoo are so similar, that they may be considered together. These were surveyed by Captain Simmonds, and settled by Mr. Montgomery in the season of 1834-5. The culturable area has been often overstated. There is no reason, however, to think that the defects of this survey have produced any evil consequences.

135th. The assessment is light. It has been collected now for two years without any balance, or the smallest difficulty. In June of each year, the whole demand for the Fussly year, beginning on the 1st of October, has been collected.

136th. There is no reason to believe that the boundary work has been otherwise than well done, and that thoroughly. A few cases about which doubts existed, have since been examined and put to rights.

137th. The rights of proprietors and rent rates have been generally recorded, but the complete form, subsequently introduced, was not then in use. Voluntary agreements were not then entered into by the proprietors, and the partition of the waste land in each village amongst the several co-parceners has not been so thoroughly done here as elsewhere. The rule of partition has always been fixed, but that rule has not yet been universally carried into effect.

138th. The survey and settlement of Pergunnah Belhabans were completed in the same season of 1834-5. The survey was conducted under the immediate superintendence of Lieut. Fordyce, then an Assistant to Capt. Simmonds, and was executed in a superior manner. The Pergunnah is held by one large brotherhood of Bais Rajpoots, who agreed to their Jumma in the gross, and distributed it themselves equally on every beegah of cultivation throughout. This singular proceeding was prevented from falling unequally on the several members of the communities, from the circumstance of the property of each being scattered about different Mouzahs, and in the mode generally known as *khet khut*, so that every man had land of each sort. It must however be borne in mind, that this measure has produced a very unequal village assessment, as those which have poor lands are taxed equally with those that contain good lands. Each Mehal must always be held responsible for its Jumma, not each Mouzah.

139th. The assessment is light, but some difficulty will always be experienced in collecting it, for the people are very unruly, and bear a bad reputation in the district. They are said, it is to be feared with reason, to harbour thieves and bad characters of all descriptions, and no doubt to participate in their gains.

140th. Something is wanting in the Pergunnah in working out the principle laid down at the time of settlement regarding the division of the waste land in each village amongst the several Puttees. This has not been regularly enforced, and no doubt cases exist, where an actual partition is necessary, and ought to be immediately carried through.

141st. Pergunnah Deogaon was surveyed by Mr. Terraneau in the season of 1834-5, and settled by myself in 1835-36.

142nd. The boundaries were very well laid down by the Native Deputy Collector, Seyud Nawazish Ali, and the very respectable Tuh-sildar, Meer Muxood Ali. The villages were so much broken and intermixed, that this was a work of no ordinary difficulty. It was done not only completely, but with the fewest possible complaints, either on the score of partiality or unnecessary expense.

143rd. This Pergunnah was unfortunately chosen as the one in which a new survey party commenced its operations. The villages often consisted of broken fragments of land, some larger, some smaller, some mere fields, others tracts of cultivated and uncultivated land, scattered about at considerable distances from each other. The only way to survey those villages satisfactorily would have been to make certain defined circuits in different directions, of the ordinary size of villages, and corresponding as nearly as convenient with existing boundaries, to have surveyed the same circuits professionally, and by native Ameens, and after thus testing the accuracy of the latter, to have taken out from the native field maps the several fields or parcels of land constituting each village, and to have added these up as giving the total area. This however was seldom attempted, and where it was tried, was done so incorrectly as to be nugatory. The native measurements were frequently approved, and passed as agreeing with the professional, when the areas surveyed were totally different. The professional survey itself is often grossly incorrect, both in its representation of the cultivation, and its delineation of the boundaries. The native maps have received scarcely any check, several of them are scarcely intelligible, and in many fields belonging to different persons, different Puttees, and even different Mehals, have been grouped together in one number.

144th. I have done what I could to remedy this state of things, by examining the boundaries, making additional native maps where necessary, distributing the fields and holdings afresh. Such inaccuracies in the professional maps as I happened to meet with, were noted on their face, but I well know that there are many which must have escaped me. The total areas were taken from the professional survey, so that the total of the Pergunnah, according to the survey, and according to the settlement papers will agree, but the areas of the several villages will often differ considerably, owing to the adjustments which were found necessary.

145th. This Pergunnah was the highest assessed in the district, and very little increase on the former settlement could be anticipated. Not only was the rate of the former Jumma on the land high, but the land itself is inferior in quality to that of other parts of the dis-

trict, yielding mostly very uncertain rice crops, and the Zemindars are numerous, each holding a small portion of Seer land on which he subsists, whilst from being Rajpoots of high caste, they are unthrifty cultivators. The main object in the settlement was to equalize the assessment, and much has been done towards this. The settlement has perhaps given more satisfaction than any other in the district, and this result was mainly attributable to the impartial, upright, and very conciliatory conduct of the Tuhsildar.

146th. In estimating the character of the settlement by the averages, it must be borne in mind that the cultivated area has certainly been under-measured, and that no land has been put down by the professional survey under the head of culturable. Whatever was not under the plough, or had not evidently been so within the two or three preceding years, was classed as barren waste.

147th. The record of proprietary rights has been carefully, and well done by the Tuhsildar. The Persian papers are very complete, though the English statements have not been as yet drawn out in the form best adapted to elucidate the peculiar tenures of the Pergunnah. These however are now in a course of preparation, on a plan prescribed by the Sudder Board of Revenue subsequently to the conclusion of the proceedings. No difficulty will be experienced in giving the materials any form which may be thought most expedient.

148th. Pergunnah Mahol was surveyed by Lieutenant Fordyce, in the seasons 1834-5 and 1835-6, and settled by Mr. Montgomery, in the latter year.

149th. The boundaries were mostly laid down by the Native Deputy Collector, and by the Tuhsildar, Buksish Ally Khan. The work was not satisfactorily performed. The people are low, and litigious. The Tuhsildar had little experience in the Pergunnah.

150th. The survey was very well conducted, and may be relied upon.

151st. The settlement though showing a high average, is very light, for the land is exceedingly valuable. The finest Sugar land, perhaps, in all India is to be found here.

152. The tenures are simple, being mostly Zemindarry, where the co-parceners held jointly or severally according to their hereditary shares. The point of greatest importance was the formation of good rent rolls to show the rights, holding, and rates of all the non-proprietary cultivators. This has been carefully done by Mr. Montgomery, and these relations are now placed on the best footing. The rent rolls, or *Jummabundee*, were formed after the settlement, drawn up in the common Nagree character, published to those concerned in every possi-

ble way, by personal explanation to as many as were present, and by suspension in the village before the eyes of all ; objections against any parts of these were afterwards heard, and orders passed as each case required.

153rd. Pergunnahs Mahomedabad, Gohna, and Mhow were surveyed in the years 1834-5, and 1835-6, and settled by myself in the latter year.

154th. The boundaries were decided and marked off by two Tuh-sildars, Ahmed-oolah Khan, and Zulheer-ool-huk, who were there successively under the personal superintendence, first of Mr. Montgomery and Mr. Chester, and latterly of myself. These proceedings were unnecessarily protracted, rendered very expensive to the people, and sometimes in the final result unfair. Great exertions have however been used to render them complete, and to correct any errors that may have been committed. The undertaking was of vital importance to the prosperity of the district, for there is much waste land, the title to which was greatly disputed, of great capability, and now covered with wood, which is in high demand at the Sugar factories scattered all over the district.

155th. The boundaries were often erroneously laid down, and little pains taken to reconcile the professional and *khusreh* maps. The important point to be borne in mind is, that the professional map cannot always in itself, and alone, be held conclusive on the form of a boundary. Before a certain conclusion can be arrived at, the maps of the two continuous Mouzahs must be compared, the proceeding held on the adjudication of the boundaries examined, and reference had to the *khusreh* maps, and any other sketches of the boundary there may be. If the process be carefully conducted, on the occurrence of any dispute it will be impossible to fall into any great error.

156th. The assessment is light, more so than is shown by the averages, for there is good reason to believe that the cultivated land was much under-measured, and the culturable land was avowedly shown as barren waste.

157th. Great exertions were used to make the records of proprietary rights and rent rates as perfect as could be, and sanguine hopes may be entertained, that these are placed on a satisfactory footing.

158th. The Pergunnahs of Gopalpore, Kowreeah, and Atrowieeah Tilhenee were surveyed by Lieut. Fordyce in 1835-6, and settled by Mr. Montgomery in 1836-7. Three large Talookahs had however been previously settled by the late Mr. George Bird, in 1831-2, and the arrangement confirmed by the Government. These were incor-

porated into the present settlement, with no further change than the extension of the period of the lease.

159th. The boundary work was done almost entirely by the Tuh-sildar, Sheikh Waheedooz-zuman, with constant supervision and occasional assistance from the Native Deputy Collector, or the European functionaries. It appears to have been very well performed.

160th. The survey was well conducted. These Pergunnahs are undoubtedly the best surveyed in the district.

161st. The assessment is fair and equitable. Adverting to the nature and capabilities of the soil, it is low ; but if the character of the people and the nature of the tenures is borne in mind, it is quite as high as it ought to be. In comparing the averages of this assessment with those in other Pergunnahs, it must be remembered that here the survey is a very faithful representation of the extent and character of the land, and that therefore the rate of assessment is not actually as much below that of the rest as it appears to be. The Zemindars are high caste, pugnacious Rajpoots, and their tenures *bhyachara*. There are also many Bramins who hold lands at low rates as under-tenants, and exercise a powerful religious influence over their superstitious landlords. The revenue administration of this district has always been most difficult. The late operations will materially facilitate the collections, but still difficulties must be anticipated. It is only some years of firm and consistent rule, which will suffice to bring the turbulent inhabitants to industrious and regular habits.

162nd. The settlement of Pergunnah Suggree occupied a long period, and was not finally completed till the year 1836-7. Some few settlements were made by Mr. Barlow, under Regulation VII, 1822, but the greatest bulk by Mr. Montgomery, who also recast the prior settlements. The work was completed and reported in 1834, before the introduction of the new system, but the Commissioner judiciously declined forwarding the report then, and desired the whole to be reviewed under the new rule. This was admirably done by Mr. Montgomery.

163rd. The Kishwaree survey was long ago completed by the revenue authorities, so that the Surveyor was relieved from this duty, and desired merely to survey the boundaries, sketching on the geographical features of the country and omitting the interior survey, or that part of the operations which was designed to distinguish the cultivated from the uncultivated lands.

164th. The adjustment of boundaries had formerly, as in Pergunnah Nizamabad, been much mismanaged, but before the approach of the survey these were all definitely settled, and well marked off, so

that no difficulty was experienced. Some of the decisions may, as in other cases, have been unfair, but the survey is now a faithful record of what the decision was. There can never be any doubt hereafter on that score. The professional operations afforded also a complete and very satisfactory proof of the correctness of the former Khusrey survey.

165th. The assessment is light and equable, and has now for three years been collected without any balance. The record of proprietary rights, &c. has been completed on the plan prescribed, and the settlement is now as perfect as of any other of the district; though it has only been brought to this state at a great expense to the people, and with much personal vexation to them.

166th. Pergunnahs Ghosee and Nuthoopoor were surveyed by Mr. Terraneau in 1835-6, and settled in 1836-7 partly by myself and partly by Mr. Montgomery. The boundary work had been slowly advancing for the preceding year or two, but it was completed by the Native Deputy Collector just previous to the survey. The work was ill done. The large quantity of rich land lying waste about different parts of the Pergunnahs rendered it certainly a task of some difficulty, whilst the wealth and intriguing character of some powerful men in the Pergunnahs added to the difficulty of executing the work with fairness to all parties. The evil, instead of being detected and exposed by the survey, was concealed and aggravated by its operations. Not only were the defects of the demarcation concealed, but where the demarcation was plain and evident, and no dispute whatever existed, errors of the most fatal nature were committed in the survey. Had the professional maps been received and recorded without question, the greatest confusion would have ensued. As it was, the assistance of a professional surveyor was obtained. All the maps were carefully reviewed, compared with each other, with the record of the adjudication of the boundary, and with the Ameen's map. Whenever any doubt existed, a personal examination of the boundary and renewal of the demarcation took place. This was superintended either by myself or by Mr. Montgomery. We always found that adequate decisions had been passed, but that these decisions had not always been clearly marked off. The whole has been now carefully corrected, and no future doubts can well arise, as to the position and direction of the boundary. I am however bound to say, that owing to various causes, which it is needless to enumerate here, the decisions have been more influenced by corrupt motives, and are more unfair, than in any other part of the district.

167th. The assessment is light, and will be easily paid, as the soil is very rich, and there is much fine culturable land, which will

rapidly be brought into cultivation. It must also be borne in mind that the cultivation has been under-measured. The rights, &c. of the proprietors have been well recorded, and the subsequent separation of shares generally completed.

168th. The settlement of each Pergunnah has been thus reviewed. Under ordinary seasons, and with good management, I have little doubt of the stability of the whole, with the exception of a few villages in Nizamabad.

169th. If the present demand for the staples of the district, Sugar, Opium, and Indigo, continues undiminished for a few years, the advance of the district in wealth and prosperity will be more than repaid. Its welfare will however depend much for the few first years on the firmness of the civil administration. If the arrangements made at the settlement are disregarded, the boundaries violated, the rights of proprietors and cultivators neglected, and misrule allowed to prevail, great confusion will ensue, industry will be checked, and improvement stopped. The effect also will immediately be felt in the collections of the Government revenue. The number of persons from whom these collections are to be made are numerous, and their rights nicely balanced. Each man now knows what he has to pay, and it will be difficult to make the redundancy of one compensate for the deficiency of another. If rights are usurped, the injured party will be deprived of the power of meeting the demand against him, and a balance will accrue. If hereafter balances should arise in the district, it must be remembered that this may be occasioned by mal-administration as well as by other causes, and is more likely perhaps to do so here than in many other parts of the country.

170th. The Tulsildaree establishment should not be diminished. It is now strong and well disposed, but this is necessary on account of the minute division of property, and the numerous persons from whom the collections have to be made.

171st. Much increase must not be expected to the present demand. The Pergunnah of Deogaon is settled fully as high as it can ever bear. Much good would arise from its being declared perpetual. The same is the case in Gopalpoor, Kororeeah, and Atroleeah Tilhenee. In Mahol, Cheriakote, Belhabans, and Suggree, the assessment has reached its maximum, or so nearly, that further investigation would not be repaid. In Nizamabad there is still much valuable uncultivated land. The total demand from this Pergunnah will probably never be increased, but its readjustment and fresh distribution after the expiration of the present period of settlement would be a great advantage. In Mahomedabad, Mhow, Ghoosee, and Nuthopoor there is still much

valuable waste land, which will probably be made productive in the course of the present lease. Fifty thousand rupees might thus very probably be added to the rent roll of Government on the renewal of the settlement.

(Signed) J. THOMASON,

Collector of Azimgurh.

Offy. Secy. to the Lt. Govr., N. W. P.

Agra, December 16th, 1837.

ART. II.—MR. HODGSON, on *Cuculus*.

To the Editor of the Journal of the Asiatic Society.

SIR,—Amongst the numerous new birds forwarded by me to London, some years back, when I was young enough to imagine that learned Societies existed solely for the disinterested promotion of science, was a very singular form combining all the essential internal and external characters of *Cuculus* with the entire aspect of *Dicrurus*.

Unceremoniously as many others of my novelties have been appropriated, this one still, I believe, remains undescribed, and I therefore beg to present to you a description and sketch of it.

SCANSORES,

Cuculidæ,

Genus *Pseudornis* nob,

Generic character, essential characters of *Cuculus* with the entire aspect of *Dicrurus*. Tail 10, forked. Type *Pseudornis Dicruroides* nob. Habitat. The mountains exclusively. Specific character, Black, with a changeable blue or green gloss. Inner wing and tail coverts, and pair of extreme tail feathers, cross barred with white. An oblique white bar across the wings internally, and high up. Bill black. Iris hoary brown. Palate red. Legs and feet blue. 10 to $10\frac{1}{2}$ inches long, whereof the bill is $1\frac{1}{16}$ and the tail $5\frac{1}{2}$ to $5\frac{3}{4}$. Tarsus $\frac{12}{16}$. Long anteal toe $\frac{11}{16}$. Long postal toe $\frac{9}{16}$. Weight $1\frac{1}{2}$ oz. Sexes alike. General manners of *Cuculus*, but exclusively monticulous and a forester.

Remark.—The bill, tongue, feet, and wings are precisely those of *Cuculus canorus*, with these trivial diversities—if such they can be reckoned—that the wing is hardly so elongated, and the bill is less rounded on the culmen.

The tail consists of ten feathers, and is both in relative size and in form like that of the genus *Dicrurus*; that is to say, it has ten feathers, and is divaricated and forked, though the fork be not deep



PSEUDORNIS DICRUROIDES NOB.

Type of GENUS PSEUDORNIS NOB. $\frac{1}{2}$ Nat: Size



There is this difference, however, as compared with the *Dicrurine* tail, that in our bird the two extreme feathers are much *smaller* than any of the rest; whence the fork of the tail becomes lessened in depth, these plumes not contributing to it.

The singular assumption of the entire aspect of so remote a genus as *Dicrurus* on the part of this strictly *Cuculine* bird will, I fancy, be generally considered extraordinary; and has suggested the generic name of *Pseudornis* (ψευδος falsus) The *Cuculus lugubris*, although described as having a *wedged* tail, will, I think, be found to have a forked one, and to constitute a second species of our proposed new genus, which will be, in that event, placed on a firm basis.

If it be remarked, that supposing *Lugubris* to have really a forked tail, it is, in fact, specifically identical with our bird, why then the specific name *Dicuroides* will merge in that of *Lugubris*, but the new type of form may still claim to be recognised, and surely will do so.

The green glossed black plumage and the forked tail, are as universally the marks of the *Dicrurine* sub-family as they are, I believe, universally excluded from the *Cuculidæ*.

I am, Sir,

Your most obedient servant,

W. B. HODGSON.

Nepal, March, 1839.

ART. III.—*Report on the Coal and Iron Mines of Tálcheer and Ungool, also remarks on the country through which it was necessary to travel in search of those minerals, the produce, inhabitants, nature of the soil, roads, &c. &c.* By Mr. M. KITTOE, Curator and Librarian Asiatic Society's Museum.

March 31st, 1838.

All necessary preparations having been made, and assistance received from the superintendent tributary Mehauls, I left Cuttack on the 14th March, in company with Mr. R. Beetson, (contractor for the transport of salt from the coast to Calcutta) and proceeded by regular marches through Dhenkennal, direct from Kuckur on the Mahanud-dee to the Brahmenee at Atturva, encamping first at Kuckur Govind-poor, and secondly at Deogaon, under the famous hill of Kuppilás, near to the summit of which, at an elevation of 1000 or 1200 feet, is a fine spring of fresh water, round which are several ancient temples built by Pertaub Rudr Deo, king of Kalinga, in the sixteenth century of the Christian era.

From Atturva we proceeded up the south bank of the Brahmenca to Tálcheergurh, where we arrived on the seventh day, encamping at Nadurra and Kumalung, the distance travelled being 30 Ooriya coss of $2\frac{1}{2}$ miles to the coss on an average.

We halted one day at Tálcheer, and interchanged visits with the Rája (who is a very intelligent man, and has travelled all over India) likewise his eldest son. I presented the old gentleman with a musical snuff-box, with which he was much delighted.

After duly examining the coal beds I proceeded to Mungulpersád, a stockaded village on the borders of Ungool, the distance seven coss in a westerly direction, over an undulating country, with, generally speaking, indifferent soil and much shingle.

We remained one day at this place, and having inspected the coal beds, &c. returned by a more direct (though crooked enough) route through the states of Tálcheer and Ungool, to the bank of the river (at Mungulpoor) along which we proceeded, via Nadurra, Nágnáth, Chundpál, Kapeepoor, to Kewátbund, near to which place the river enters the plains, throwing off that branch called the Kursooa, which is the only navigable channel to the sea. We reached this place on the 26th, thirteen days from the date of our leaving Cuttack.

The country is neither so mountainous nor jungly as it is represented to be, but for the most part, much neglected; although the soil appears generally good, and productive.

The lands in the immediate vicinity of the Brahmenca are very rich. Great quantities of cotton, sugar-cane, castor-oil plant, linseed, &c. &c. are grown for home consumption, as well as for exportation; the chief profits of which are monopolized by the Mukhtecars and Survurakars of the states, who farm the villages from the Rája, and make the most of their bargain by extorting the utmost fraction from the cultivators, who are in fact mere slaves; indeed so are all the inhabitants of these hill provinces; they nevertheless seem happy in their poverty and degraded state.

A great deal of very fine tobacco is grown along the banks and on the muddy deposits of the river, and such lands fetch an exceeding high rent; notwithstanding which the profits on this article of commerce are very great.

Wheat and barley are cultivated in small quantities, and what little I saw appeared to grow most luxuriantly; maize, &c. is also grown on the high lands by the meaner classes, but rice is the chief article of food.

The land in Tálcheer and in Ungool is not so good as in Dherkuomál; and the trees are stunted in growth owing to the shingle,

laterite, and sandstone rocks which are near the surface. There is more jungle and waste land on the opposite side of the river.

From the third march from Atturva to the plains (commencing at Kewátbund) the level lands vary much in extent, the hills in some places coming within 3 or 400 yards of the river, and in others, receding for two or three miles, forming no connected chain, but all more or less isolated (apparently of volcanic origin), the land between them being perfectly level, except where ravines or beds of laterite and kunker occur to interrupt it. At Atturva the hills recede gradually, till at Kurugpursád they branch off in a south-westerly direction, through the state of Hindole into Ungool, towards the Mahanudde; the hills on the opposite side of the river also recede in a north westerly direction towards Keonjur and Bounnaragurh.

Shortly before reaching Kurugpursád the country commences to be undulating, and extensive beds of shingle occur, with red marl. Sandstone rocks are met with at Mungulpoor, protruding through the soil, which are very close grained and white; granite also sometimes occurs in huge detached masses, which have a very singular appearance, particularly at Kukurdung, in Ungool, where they rise in detached blocks of sixteen and eighteen feet in height, and of most fantastic shapes, somewhat resembling the Stonehenge. The land on the north bank of the river is likewise undulating, with rocks. No hills of any magnitude are to be found within twenty or thirty miles of Tálcheer and the coal localities visited by me.

From Tálcheergurh to Mungulpersád, a distance of sixteen miles or more, I saw much shingle and rising ground, on which there is iron ore and laterite, also kunker (calcareous nodules) and sandstone rocks. I observed near the different villages much scattered cultivation beneath the sál and other jungle trees, the underwood having been cleared away; this is the consequence of overtaking the arable and clear lands, and taking nothing for cultivation of this kind, which is little inferior to the best.

There are no wells, and but few tanks throughout the country. Except in the low lands, in the vicinity of the river, water is very scarce, and what little there is, is of bad quality, particularly in Ungool, where some of the wells and tanks contain naphtha.

There is much waste land overgrown with long grass, which affords excellent pasturage for buffaloes and cows; there are consequently very fine herds of both descriptions of cattle, which are far superior to those of the Mogulbundee (or plains). There are but few goats and sheep.

The people of these states are more artful than even the inhabi-

tants of the plains of Oorissa, who are bad enough. Their craftiness is beyond any thing credible. I have travelled a great deal during my residence in India, and had much intercourse with the different classes of natives, but never did I meet with such provoking knaves as the people of the Gurhját (hill states). It is next to impossible to obtain any correct information even on the most trivial subjects. Every question put by a stranger is considered and re-considered, ere a reply is given, and that, too, is an interrogation as to the object you have in asking it. And should you ask the distance from one place to another, you will be answered at random, or told, "I don't know; I have never been there; I was born in this village; so was my father," and such like;—this is to prevent your asking them to go with you and show the path, and if you take them, they will lead you by the most tortuous route.

I was informed that it is more than any ryot's head is worth to give information regarding the internal economy of the state, or about its resources, or, indeed, on any subject. With such people to deal with, it is not surprising that very little information has been gained by me during such a hurried trip. What I have obtained regarding the Hingolae mines, was from an ascetic, to whom I made a suitable present. I also heard of coal and iron mines in Bumurragurh, from a merchant of Cuttack, and accordingly despatched an intelligent peon to examine them, and to bring specimens, &c.

There is no road along the banks of the Brahmenec, but an irregular and narrow footpath; indeed there are no hackery roads at all. The only road of any consequence is that leading from Cuttack through Dhenkennalgurh, past Kurugpursád and Mungulpoor, and on to Boad; it is tolerably wide and smooth, and is much frequented by Bunjaruhs, who bring cotton, iron, and turmeric in return for salt and tobacco. From Mungulpoor, onwards, the road is nearly due east and west.

Remarks on the Water Carriage for Coal, &c. &c.

The Brahmenec is navigable for good sized boats from the end of June to the middle of December, and sometimes later. Coal could be laden in small canoes and conveyed to Kurugpursád at most seasons of the year indeed. The Dhenkennal boatmen assert that small boats only can navigate the river above that place at any season owing to the numerous rocks; this is however not to be relied upon, for there are but few, which could be removed at a trifling expense.

From Kewatbund (at the edge of the plains) boats and rafts are floated down that branch called the Kursooa.

The furthest point towards the sea to which the coal could be taken is Hunsoogolá, where large sloops anchor. It would be preferable to make this place a depôt, Auligurh being many miles further up the river. It is to these places that Messrs. Beetson's sloops come for salt. There is a bankshall belonging to them at Aul, where sloops are built and repaired. The timber is cut and purchased in Dhenkennal, where it is very cheap, and may be had of any size and quality, viz. sál, sissoo, bijesál, kúrumb, girahu, &c. A native contractor offered to carry the coal from Tálcheer to Hunsoogola, at the rate of twenty-five rupees per 100 maunds, or four annas per maund; the boats making three trips each season. The lading is included in this amount. Mr. Beetson however informs me that it could be done for one anna per maund, or, at the utmost, two annas.

From Hunsooa Mr. Beetson would contract to carry the coal to Calcutta, or to any port lower down the coast; and from his experience of the natives of Oorissa, and his industrious habits, I should venture to recommend any contract for the working of the mines, or transport of the mineral, to be offered to him.

The iron mines are worked by the different traders, who give grain, tobacco, and salt, to the value of one rupee per maund of metal. Should the coal mines be worked eventually, it would be necessary to pay for the labour in like manner, for money is unknown to the lower orders; cowries alone are current, and there is a great scarcity of them even. Although there are but few inhabitants, many poor people from the surrounding states would flock to earn food, if proper protection be afforded them. Some difficulty would be experienced at the outset, but that would soon subside.

On the Tálcheer Coal.

That which I shall distinguish by the appellation of "Tálcheer Coal," is found near the town and gurrh of that name; the town gives name to the whole district, which is 14 Ooreya coss in circumference, or forty-two English miles, more or less.

Tálcheergurrh (the Rájá's stockaded palace) and town (called Patna) are situated on the south bank of the river Brahmenee, on a sandstone rock, rising to the height of 20 or 30 feet from the level of the water. The surrounding country is undulating, with a thin stratum of soil resting on shingle, composed of the debris of primitive

rocks, iron clay, jasper, &c. Half a mile or less above the gurl, is a small nullá called, "Billaijooree," about fifteen yards wide, with a sandy bed, and dry except in the rainy season after heavy falls in the interior, where it takes its rise, and winding considerably, joins ultimately with the Brahmence at this place.

About 400 yards from the mouth of the nullá, coal seams are exposed to view for some distance along the banks, alternately, on either side; these seams vary in quality and thickness, and are curved parallel with the undulations of the superstrata. In almost every place where the coal seams cease abruptly, they will be found to rest against the sandstone.

The superstrata generally consist of alluvial soil, shingle, marl, blue clay passing into peat, mixing with shale and coal of inferior quality, beneath which the good coal is found; this again rests on indurated blue clay containing particles of coal, mica, and fossil plants. The stratum is about $1\frac{1}{2}$ foot thick, beneath which a stiff grey clay mixed with sand and mica, is found.

I made a perpendicular cut in the north bank, at a spot where inferior specimens had been collected by workmen sent some years ago by Mr. G. Becher, executive officer of the division. Having dug down for two or three feet below the surface of the bed of the nullá, I met with a hard blue rock containing particles of coal and fossil plants, in this I bored a hole $1\frac{1}{2}$ foot deep, and blasted it with one pound of country powder, which enabled me to ascertain the thickness, viz. $1\frac{1}{2}$ foot, as before said.

The section thus afforded, gave

Shingle and clay, averaging,	10 ft.
Blue clay passing into peat,	$1\frac{1}{2}$ ft.
Shale, or slaty coal and lignite,	$1\frac{1}{2}$ ft.
Good glistening coal,	1 to $1\frac{1}{2}$ ft.
Grey rock with fossils and coal,	1 ft.
Ditto ditto, with mica,	6 inches,
Stiff grey clay with mica and sand (?)	

Digging a few feet apart from this spot, in the bed of the nullá, the coal was three feet below the surface, without the peat and clay, &c. and under the opposite bank the coal is several feet deeper still.

I burnt a heap consisting of several maunds of the different kinds mixed together, the whole was consumed, leaving fine white ashes, but no cinder or coke. The glistening or good qualities emitted much gas, and burnt with a bright flame; the remainder soon attained a red heat with less gas—the whole gave out an intense heat.

The bed of coal thus examined is (as will have appeared) very thin,

but I should think that on mining, any quantity could be obtained, and at little cost, from its being so near the surface, and labor cheap in the extreme. It possesses, further, great advantages in being so near to a navigable river.

I shall treat hereafter on the method of working the mines, and of transporting the coal, &c. in a separate paper at the close of my report.

Coal fields of the Hingolai Tacooranee at Mungulpersád.

Of the two coal fields exposed to view, and which were visited by me, that which I have called the "Tacooranee" is the more extensive. It is laid bare by a broad nullá passing through it, called the "Sungurra," it comes from the hills in Ungool, in a south-westerly direction, and is about thirty yards wide, having a sandy bed. The coal appears on either side alternately, for a distance of upwards of a mile, the beds averaging from five to fifteen feet and more in height from the level of the sand. This coal (like that at Tálcheer) rests against the sandstone, and in some places passes into it, apparently mixing with it. The quality of the mineral varies very considerably, as will be seen by the numerous specimens presented to the Committee.

In one spot the coal has apparently been reduced to ash by volcanic action for a space of fifty yards, and upheaved above the common level of the contiguous beds; it is bounded at each extremity by dykes of white rock.

The superstrata vary in kind and thickness; in some places there is blue clay, above which is marl and shingle; in others, simply marl and iron ore, laterite, and shingle, and frequently but a thin stratum of clay. At the spot where the "Tacooranee" (goddess) called "Hingolai" is supposed to preside, the coal is entirely bare for a space of 1000 or 1200 yards (superficial) with an undulating surface. It is at this place that at the full of the moon of Chát-Byesk, the priesthood set fire to a heap of coal, which they keep burning for three successive days, commencing the day preceding the full of the moon, when hundreds of deluded creatures flock from the surrounding country to worship the goddess of destruction, who is supposed thus to shew her presence in the burning rock. I was unable to ascertain how far up the nullá the coal is exposed to view, as the inhabitants of one state will say nothing about their own country, and still less about that of another Rája; and as the Ungool territory is only half a mile distant, without any alteration in the general appearance of the country, which is undulating, I did not deem it necessary

to proceed further. There was sufficient coal at this place to afford an ample supply for the next century.

The cost here of working either the coal or iron mines would be the same as at Tálcheer, it would, however, be necessary to construct a road (perhaps a rail road) to the river side, a distance of sixteen or eighteen miles, but perhaps less in a direct line. The nullá is not navigable at any season, however from the tolerably level nature of the country it might be rendered so for two or three months, by constructing dams and locks at convenient distances. At all seasons water is found from one to three feet below the surface of the sand; this prevented my ascertaining the actual depth of the coal measures and the quality of the lower veins.

Note on the Iron Mines.

Iron ore is found in great abundance both in Tálcheer and in the adjacent states of Ungool and Dhenkennal. There are iron works in each, and the Cuttack and Berhampoor markets are supplied by them. Some of the iron is of a superior and malleable quantity, but much of it is very coarse-grained and brittle, the prices vary accordingly.

I saw the remains of several iron works on the road between Tálcheer and Mungulpersád, the “Lohorás,” or iron workers, having forsaken them last year in consequence of the famine, and subsequent pestilence (cholera) which almost depopulated the country.

The process of smelting the ore is the same as that pursued in other parts of India, and which therefore it will be superfluous for me to describe.

Had I met with any iron workers I would have tried to smelt the ore with coal, as it is abundant on the surface at the coal mines, as I have before mentioned.

A great quantity of iron is made in the Sumbulpoor state also.

ART. IV.—*Objects of Research in Afghanistan.* By PROFESSOR LASSEN, of Bonn.

[We have the pleasure to insert the following article by Professor Lassen, and which in order that no time should be lost in its circulation, we have already caused to be published in the Newspapers of this Presidency. Such communications as Professor Lassen's queries may elicit we shall be happy to publish without delay.—Eds.]

1. A country which has hitherto not been explored, is Kandahar and its neighbourhood ; the capital of Demetrius, called by his name Demetrias, was situated in Arachosia, and it seems probable, that coins of Demetrius will be found most numerous in that part of Afghanistan, if Mr. Masson should have means for sending some qualified person there. Another class of coins might also be chiefly expected from Kandahar. Arachosia belonged, at least generally, to the empire of the Arsacidæ, who can only be supposed to have occasionally possessed parts of Kabul ; Parthian coins bearing a Greek legend on one side and a Bactrian on the other, will probably have been struck only by such kings, as ruled in Kabul and its neighbourhood. Vonones (or by the native legend his son Vologases) is the only known Parthian king, from whom we have as yet coins of the above description ; another name found on a coin published by Swinton is not legible ; a new coin was lately edited by Mr. Millingan, having no Greek, only a Bactrian legend, evidently an Arsacidan one, though not legible. It would be of great importance to complete this Parthian series, because the chronology of the Arsacidæ might then be brought to bear on that of the Indo-Seythians.

2. From the country to the westward of Kabul and the sources of the Kabul river, which the Chinese call by the name of Kissin, coins of the first dynasty of Indo-Seythians may be expected chiefly, if the researches could be extended to the neighbourhood of the Lake Yarah. Segistan still bears the names of the first Indo-Seythians, who were properly called Sacæ, and their capital must have been somewhere in Drangiana. Also the Greek king Artimachus appears from one of his coins to have reigned near the Lake Yarah, and it would not be unreasonable to expect coins of him and his successors, (perhaps even Greek monuments of other kinds,) from those tracts, if made accessible.

3. The town Nagara, mentioned by Ptolemæus, with the Greek surname of Dionysopolis, must have been the capital of some Greek kingdom, probably of Agathocles and Pantaleon, who exhibit the symbols of Dionysos on their coins. The Chinese mention Nakoloho which is the same name, as the site of the flourishing Buddhist establishment, about 400 years of our era in the Chinese place

Nakoloho on the river Hilo, which must be the Hir found on D'Anville's maps. It would be of importance to determine the exact situation of Nagara, and to ascertain, whether the name both of the river and the ancient town are not still traceable. I suppose the Hir to be Surshud. The ruin of Nagara may be expected to yield a new harvest of Greek coins, and its neighbourhood might perhaps furnish us with Greek inscriptions.

4. Sultan Baber mentions a monument in Lawghan, which the Mahomedans supposed to be the grave of Lamech; the Chinese travellers passed through this country, called by them Larpho, on the road to Peshawer, from which it may be concluded, that they went to see some Buddhist monument there. Would it not be possible to get some further information of what remains still to be found in Lawghan?

5. Pliny mentions a town Copissa, 'destroyed by Cyrus,' in the country of the Paropomasidæ; by the accounts of the Chinese travellers Kapisa is the valley of the Gurbad river. Are no remains to be found along that river? and is the name at present quite unknown? It would be of some interest, because it might be conjectured that the name of Kapisa has some relation to the name of the king Kadphises, who on his coins spells his name in the native legend Kapissa.

6. The Chinese speak of a flourishing Buddhist kingdom Udjana, or Ujjana, which was situated on the western bank of the Indus and on the Sewad river, the capital was not far from the last mentioned one, and was called Mangala. As far as I know, this country has not been explored at all, and might be expected to yield coins of the dynasty ruling for several centuries there: topes might also be sought for in that neighbourhood.

7. Jan Messon, as well as Sultan Baber, speaks often of a river, which he calls Baran, without giving any more definite description of its course. Is this river different from the lower part of the Penjhir? or is it only the name for a part of that river?

8. A theory has lately been set forth respecting the topes, that they are to be regarded as dehgops, and contain relics of Buddhist saints; moreover, that the coins found in them have been placed there at different times as offerings, and consequently that the date of coins found in a tope, affords no clue to the period of its erection. Now, this theory supposes that the topes had entrances and openings, by which the coins might be inserted, and the relics taken out at certain festivals to be shown to the people, as is mentioned by the Chinese travellers of dehgops. Are there any traces of such entrances or openings in any of the topes of Kabulistan?

9. Is the dialect of the Kohistanis of Kabulistan a peculiar one, or related to the Lawghans, or that of the inhabitants of Kaferstan?

10. The Kirdhkis mentioned by Mr. Elphinstone as forming part of the population of Eastern Kabulistan, speak an Indian dialect; is this dialect nearly related to Punjab? and are the Kirdhkis to be regarded as emigrants from India in comparatively modern times, or remains of the ancient Hindu population? As far down as to the times of Mahmud of Ghazna it may be shown, that the inhabitants of Kabulistan were Indians, and most probably direct descendants of the Gurses, Ascadars and Gandars spoken of by the ancients.

ART. V.—*On the detection of Arsenical Poisons by MARSH'S process—its inapplicability to the Sulphurets of Arsenic—and the mode of obviating the fallacy occasioned by Antimonial Compounds.* By W. B. O'SHAUGHNESSY, M. D. Acting Joint-Secretary to the Asiatic Society.

In December, 1836, I exhibited to a large party at Government House the very beautiful process invented by Mr. MARSH of Woolwich, for the detection of minute quantities of arsenical poisons. The method consists in placing the suspected substance in very dilute sulphuric acid, and introducing a slip of pure zinc. The hydrogen is evolved in combination with the metallic arsenic, and on examination presents most distinct and remarkable phenomena. If ignited, the flame is of a leaden blue color, and diffuses a powerful odour of garlic, and a dense white smoke. If the flame be reduced to the size of a pea, and applied to the interior of a thin glass tube, a crust of metallic arsenic is formed on the tube, surrounded by a white ring of arsenious acid. To this, by a little dexterous management, the several tests for arsenic may be applied, namely the ammoniacal-nitrates of silver and copper, and the sulphuretted hydrogen gas.

A few months after the meeting referred to, I had occasion to apply the process to the examination of the contents of the stomach of the Munshi of the Coroner's Office, who had been poisoned by arsenic contained in a ball of sweetmeat. The results were quite conclusive, and were, moreover, checked by the performance of the common process on a portion of the large quantity of arsenic adherent to the mucous membrane of the stomach.

Up to the time of this occurrence, and indeed for some months later, I participated in MARSH'S opinion, that this admirable process was applicable to all the arsenical poisons—to those not dissolved by water

as well as those soluble in that liquid; but on the occasion of a second death by one of these poisons, which came under investigation before the Police in 1838, I had proof that this opinion was erroneous.

The deceased was a young female, to whom a large quantity of crystallized yellow orpiment (sulphuret of arsenic) had been administered in curry, and in consequence of which she died after a few hours' illness. On examination of the body a quantity of yellow powder was readily separated from the contents of the stomach, and the mucous membrane of that organ was observed to be sprinkled all over with shining gold-like crystals.

On applying MARSH'S process to a portion of the yellow matter, no indications whatever of arsenic were obtained.

A quantity of the powder was then dissolved in liquid ammonia, and MARSH'S process applied, still with negative results.

I then tried the effect of converting the sulphuret into arsenious acid, which was done by boiling the yellow matter with a few drops of nitric acid. On diluting the solution with water, it was found that a single drop tested by MARSH'S method gave a most distinct metallic crust, which was readily proved to be arsenic by the application of the silver, copper, and sulphuretted hydrogen gas.

These facts are of much practical importance, especially in this country, where orpiment is commonly used as a poison. They shew that in all cases where arsenic may have been employed, we must, in the event of MARSH'S process proving negative, apply a modification of the experiment I have related, so as to bring the sulphuret of arsenic into the state of an oxide. For this purpose the insoluble parts of the contents of the stomach should be boiled in a capsule of glass or porcelain, with small quantities of nitric acid, until red fumes are no longer given off. The mass should then be diluted with water, neutralized with carbonate of potash or soda, and, lastly, examined by MARSH'S method.

To shew the delicacy of this process, I may state, that I have applied it to the one-tenth part of a grain of orpiment mixed with four ounces of solid and fluid animal matter. By boiling with nitric acid, diluting with water and neutralizing, ten ounces of a liquid mixture were obtained, from half a fluid ounce of which the metal was reduced, although the quantity could not have been quite the 200th part of a grain.

I have next to notice the only serious fallacy to which this most ingenious method is liable, and which was first pointed out by Mr. Thomson in the *Philosophical Magazine* for May, 1837. It consists in the indications given by the soluble antimonial compounds, several of which are employed in medicine, one especially as an emetic in the treatment of cases of suspected poisoning.

By repeating MARSH's process on a mixture containing tartarized antimony, it will be seen that the gas evolved burns with nearly the same color, and deposits a similar crust on the glass tube.

On examining closely the distinguishing characters of this crust, it is very possible for an experienced eye to distinguish it from one produced by arsenic. The eye however must be experienced indeed, and that to a degree which very few observers can be supposed to lay claim to. Again, the sulphuretted hydrogen produces with crusts of arsenic and antimony yellow stains so faintly differing in tint as to lend even a practised experimentalist but little assistance in his research. The sulphate of copper, again, gives only such indications as are too faint to be relied on individually, though of some value as corroborating evidence.

Nevertheless the silver test can be readily applied so as to give unquestionable evidence of the nature of the crust of metal and of oxide obtained by MARSH's process. This may be accomplished by a method which differs slightly from one pointed out by Mr. Thomson in the paper alluded to. The tube on cooling should be moistened with a solution of nitrate of silver in distilled water, and then held over the mouth of a bottle containing strong ammonia, so that the vapor may traverse the tube. If the crust be arsenical, it instantaneously assumes a vivid canary color, owing to the formation of the arsenite of silver. No approach to such an effect is produced by the antimonial compounds, so that this test affords a simple, but most conclusive check on MARSH's invaluable method

It is right to repeat a precaution as to the zinc employed. That found in the bazar often contains traces of arsenic, and should always be tested itself by MARSH's process before being employed in pursuit of any legal investigation. Secondly, the zinc by which arsenic has been once detected should never be used again, as the surface often unites with and retains as much of that metal as may falsify a further experiment.

ART. VI.—*Proceedings of the Asiatic Society.**Wednesday Evening, the 6th February, 1839.*

The Honorable Sir E. RYAN, President, in the chair.

The Proceedings of the last Meeting were read and confirmed.

Messrs. A. PORTEOUS and J. COWIE, proposed at the last Meeting, were ballotted for, and duly elected Members of the Society.

Mr. WM. JAMESON proposed by the President, seconded by Mr. H. T. PRINSEP.

The Honorable Sir H. SETON proposed by the President, seconded by the LORD BISHOP of Calcutta.

The Rev. JOHN HENRY PRATT, of Caius College, Cambridge, M. A. proposed by the President, seconded by the LORD BISHOP of Calcutta.

Mr. EDW. THOMAS proposed by Capt. FORBES, seconded by Dr. O'SHAUGHNESSY.

Mr. J. W. LAIDLAY proposed by Mr. W. STORM, seconded by Dr. O'SHAUGHNESSY.

Mr. A. C. DUNLOP proposed by Mr. HARE, seconded by Dr. GOODEVE.

Read a letter from C. G. MANSELL, Esq. stating that in consequence of his proceeding to England for a sort time he was obliged to withdraw from the Society, which he hoped to rejoin on his return to India.

Read the following letter from Government sanctioning the purchase of 100 copies of the Latin and Anamitan part of the Cochin-Chinese Dictionary, prepared by the Right Rev. the BISHOP of Isaupolis, for 1000 rupees, in addition to the payments already made for the first part of the work in question.

‘No. 16.

‘To W. B. O'SHAUGHNESSY, Esq. M. D. *Officiating Secretary Asiatic Society.*

‘*Genl. Dept.*

‘SIR,—I am directed to acknowledge the receipt of your letter, dated the 22d ultimo, and in reply to state, that his Honor in Council has heretofore refused to incur the expense of 2000 rupees towards executing the revised Latin Anamitan Dictionary, nevertheless rather than the 100 copies subscribed for by Government should be mutilated, and imperfect, his Honor the President in Council consents to add 1000 rupees to the payments already made by Government, under the condition of obtaining 100 complete sets of the work, besides the separate vocabularies.

‘I have the honor to be, Sir,

‘Your most obedient servant,

‘*Council Chamber, the 2d Jan. 1839.*’

‘H. T. PRINSEP,

‘*Secy. to the Govt. of India.*’

Library.

The following books were presented :

Transactions of the Society of Arts, &c. vol. 51, part 2nd—*by the Society.*

Rapport sur les Poissons Fossiles deconverts en Angleterre par L. Agassiz, Neuchâtel, 1835—*by the Author.*

Actes de la Societe Helvetique des Sciences Naturelles—*by the Society.*

Map of the Eastern Frontier of British India, with the adjacent countries extending to Yunnan in China, by Capt. R. B. PEMBERTON—*by the Government of India.*

The following books were received from the booksellers :

Georgii Wilhelmi Freytagii Lexicon Arabico-Latinum, Tome 4th.

Lardner's Cabinet Cyclopædia—Literary Men of France, vol. 1st.

Museum.

King and Queen of White Ants, presented by W. STORM, Esq.

Physical.

The Secretary read the following correspondence which took place with Government regarding Major Hay's collection of Natural History Specimens.

Copy of the letter addressed to Government, pursuant to the recommendation of the Committee of Papers.

To H. T. PRINSEP, Esq.

Secretary to the Government of India, General Department.

'SIR,

'I am directed by the Asiatic Society to request that you will submit to his Honor the President the accompanying copies, 1st. of a letter from Major Hay, relative to his Museum of objects of Natural History; 2d. of a report by a Special Committee of the Asiatic Society appointed to examine that collection.

'In submitting these documents to the notice of his Honor in Council, the Asiatic Society direct me to add a statement of their views on the several subjects referred to by Major Hay and the Sub-Committee.

'In the opinion of the Asiatic Society, the collection imported by Major Hay is of the highest value, in a scientific point of view. It not only affords to the naturalists of India standard specimens for reference in pursuit of their numerous researches, but it possesses the still greater value of being available for the introduction of the systematic study of Natural History among the Natives of Bengal, a study impracticable without the aid of such a collection, and indispensable as a preliminary measure to the full investigation of the Zoology and Natural History of our Indian possessions.

'The duplicates contained in Major Hay's collection would, moreover, serve the twofold end of completing the Museum of the Court of Directors in London, and of procuring for India exchanges of valuable objects neither comprised in Major Hay's collection, nor indigenous in this country.

'The Society while thus fully aware of the valuable opportunity now afforded for the promotion of the study of Natural History in India, are not insensible to the difficulties which oppose themselves to the procural of Major Hay's Museum. The estimate of its pecuniary value, submitted by the proprietor, far exceeds the resources of the Society, or any subscriptions which might be collected among individuals anxious to promote the object in view.

'It seems possible still that were the Government to extend its patronage and pecuniary aid to the Museum, that the current efforts of the Society and of individual subscribers might lead to the accomplishment of some arrangement which would secure the acquisition of this Museum for Bengal.

'In the event of such measures being adopted, the Society will gladly apply their establishment to the custody of the Museum, and they pledge themselves at all times to facilitate the application thereof to the furtherance of the chief end of its acquisition, namely, the instruction of the Natives of Bengal in the several subjects, such collections are capable of illustrating. For this purpose the Museum might be held available for the illustration of lectures in Natural History, delivered at any Government Institution in Calcutta, such precautions being taken as would secure it from injury or loss.

'I am directed finally to refer to your letter of the 26th July, 1838, in which you state "that the Governor General of India in Council will be ready to receive from the Society recommendations for the purchase or other procurement of objects of more than common interest, of which the Society may receive information, and for the obtaining of which it may want the necessary funds."

'The Society most respectfully represent the present occasion as one eminently deserving of the patronage of the Government, in the spirit of the views expressed in the preceding extract.'

I have, &c.

'7th Jan. 1838.'

W. B. O'SHAUGHNESSY.

' To the Secretary of the Asiatic Society, &c. &c. Calcutta.

' SIR,

Agra, December 2nd, 1838.

' I beg to forward for the consideration of the President and members of the Asiatic Society some papers connected with a collection of natural curiosities lately accumulated by myself on a visit to the Cape of Good Hope, and Islands in the Eastern Archipelago.

' In the first instance, I will briefly state my views in forming it; and afterwards proceed, as far as I am able, to give details. Until the publication of Swainson's volumes on the Classification of Animals, and afterwards of the Quadrupeds and Birds, I never prosecuted the science with that ardour which these books enticed me to. His distinctions, however, appearing so beautifully clear, it occurred to me that a Museum classified from these books, upon one uniform principle, could not fail to prove interesting; and that such was much wanting in Calcutta, I had not a doubt. I was then at the Cape of Good Hope for the benefit of my health, and having much leisure time, I took the thing in hand. My first care was to get the specimens in the vicinity of the Cape, selecting chiefly those in illustration of *genera*. I then became acquainted with that unexceptionable, *practical* naturalist and taxidermist, Monsieur Verreaux, who had been extolled for his art by his master Cuvier; had been the personal friend of Levaillant; the intimate associate of Ruppell and Lesson; and well known to several other naturalists of note. In such a person how could I fail to be interested? Through this individual I procured the only duplicate skins existing of the large collection formed by that zealous naturalist, Dr. A. Smith, who had just returned from the scientific expedition into the interior of Africa, and whose work of African Zoology is only now in course of publication. My original purchase was limited to one hundred pounds, adding for this sum only twenty genera, and a few new species. Finding however my little stock, by the addition of new discoveries, increase in interest, I determined to endeavour to procure from South America those gorgeous specimens for which that country is so celebrated, to add to the beauty of the whole. With this view I made a list of the most interesting genera, and wrote to Rio Janeiro, where I knew Dr. Natterer, the German naturalist, had been collecting for the Emperor of Austria. From that country I procured many rare and interesting birds, and a vast collection of insects. Monsieur Verreaux hearing of the illness of his father in Paris, determined upon a hasty return to his own country, and wishing to go immediately, unincumbered, offered me the whole of his remaining specimens then at the Cape, mounted and in skin. I had now become the purchaser of animals, birds, &c. to the amount of fifteen hundred pounds. The remainder of my purchases at the Cape from different naturalists being about five hundred more. I shortly determined upon leaving the Cape and proceeding to Java, with the intention of returning to India via the Eastern Archipelago, for the purpose of adding largely to (what I shall now denominate) the *Museum*. On this tour I was obliged to content myself with skins, obtaining large numbers, and curing them myself. From the Buggeese I was fortunate enough to procure some rare and interesting specimens from the Moluccas and Borneo: in fact I left no part of the Eastern Archipelago untouched, and have now brought to Calcutta the whole of my labours.

' Here, however, my difficulties commence. Upon my arrival I find my circumstances changed, and that independent of the whole of my private means expended in the forming this Museum, when my accounts are closed, I shall have a balance against me of about twenty thousand rupees, to meet which I supposed I had resources, but sundry misfortunes have left me none.

' My return to Calcutta had been so arranged that I should have had three months remaining of unexpired leave to devote to the arrangement of all I had gathered together; instead of which I found myself hampered by the most unforeseen difficulties, with no immediate funds to defray the expenses. Obligated to hurry to the Upper Pro-

vinces to join my regiment, forming a portion of the army of the Indus, it now became a serious consideration what was to become of all I had with so much labour and anxiety amassed together.

‘With only ten days to remain in Calcutta, honor pointed out to me but one course, which was to expose the whole for inspection, and eventual sale in satisfaction of my creditors. This I have done, and the greater portion is now to be seen at the rooms of Moore, Hickey, and Co. Up to the time of my leaving, I had however found it impossible to unpack, and expose for view in a secure place, the valuable portion of skins; but, although I have no list of the whole, I beg to forward a list of those now exposed for sale, the remainder are in various boxes in the godowns of Moore, Hickey, and Co. and at my own agent’s, John Lowe and Co.

‘My great desire is, that if this Museum is sold, it should be disposed of to some Public Society, or to any number of persons who would allow it to remain as a Museum for public reference.

‘I have estimated the expense of the whole at thirty thousand rupees: but my sole wish is to realise a suffice to pay my debt, and with this view I offer it to the Asiatic Society.

‘My original intention was to have exhibited it, and have demanded one rupee for the entrance of each person to defray its expenses, after which I should have handed it over to one of the Public Societies gratis.

‘From the published proceedings of your Society, I glean that you are not in the habit of expending large sums of money on specimens, but nevertheless you might probably do me the honor at an early meeting of your Society to bring the matter forward; and a discussion on your part might bring it to the notice of Government, or it might assist me in disposing of what may be on my return from Cabul a mere wreck, from want of a little care.

‘I beg also to notice, that just one year ago I despatched from Cape Town into the Namakwa country an intelligent man, furnished with a waggon and oxen, and every necessary for the purpose of collecting. Up to the latest accounts he had not returned. The expense incurred in fitting out the expedition amounted to nearly four hundred pounds, and upon his return I am entitled, without paying any thing more, to the half of every thing, which I will add free of expense to any Society or parties who may purchase the whole Museum; and as the man deputed was formerly with Captain Alexander on his travels, and at the same time an experienced person in preparing skins, &c. it is probable that he will return with many of great interest and value.

‘I shall now proceed to forward catalogues of the specimens in Calcutta, forming the Museum.

‘I have the honor to be, Sir,

‘Your most obedient servant,

‘WILLIAM E. HAY.’

‘P.S. I have succeeded in getting lists of the mounted specimens printed, but not of the skins, which must be forwarded hereafter. I have added one sheet of the skins, but time will not admit of more.’

Report of a Special Committee of the Asiatic Society on the Zoological Collection recently introduced to India by Major W. E. HAY.

‘In estimating the value of this collection, your Committee beg to state that they must be guided by different considerations from those by which they would be influenced were the objects comprising it indigenous to India.

‘The collection has been made in Africa, South America, and the Straits composing the Molucca islands; many of the objects it contains are the result of Dr. A. Smith’s mission to the interior of South Africa, other parts of it were collected under the direction of M. Verreaux, and the rest by Major Hay himself, aided by M. Verreaux in

determining most of the species; so that the collection comprises many of the most remarkable forms from quarters of the world from which the Society have hitherto received no contributions, and with which persons residing in India could only become acquainted through the medium of books.

‘The value of a collection that places it in our power here, to become acquainted with several hundred animals which otherwise we should only know by their published descriptions, must obviously be great; for so long as this country remains without such collections in every department of Natural History, so long must we be deficient in one of the first requisites for advancement in the higher branches of natural science.

‘Major Hay’s collection has yet another peculiar recommendation to us in this country, which elsewhere, perhaps, would be of less importance; namely, that most of its contents have been identified by Dr. Smith and M. Verreaux, so that the species it contains would be so many land-marks to which we could safely refer in the classification of the animals of this country—an object which still in a great measure remains to be accomplished.

‘Such being our views of the importance of Major Hay’s Zoological Collection, we are of opinion that the pecuniary estimate of its value, referred to in Major Hay’s letter to the Society, is not over-rated; but we regret that in the present condition of the Society in regard to disposable funds, we cannot recommend so great an outlay.

‘As, however, the safety of this valuable collection is an object worthy of our solicitude, we beg to recommend that the rooms of the Society be offered for its reception, that it might be at once safely and economically exhibited on the part of Major Hay, or those into whose hands it may have fallen.

‘Were such an offer to be accepted, instead of being exposed to injury in a public sale room, without the necessary attention from persons accustomed to such a charge, the collection might be much augmented in value by the exchange of duplicates with the Society. In recommending this course, we are guided equally by all interests concerned, for while we form the very highest estimate of the value of the collection, in a scientific point of view, we cannot but regret to think that if it were put up for sale, it would barely realise the expenses which have been perhaps already incurred by its exhibition.

‘D. M^cLEOD,

‘W. CRACROFT,

‘J. M^cCLELLAND,

‘GEO. EVANS.’

No. 72.

The Officiating Secretary to the Asiatic Society.

‘*Genl. Dept.*

‘SIR,—I am directed to acknowledge the receipt of your letter dated the 7th instant, forwarding copies of a letter from Major Hay, relative to his Museum of objects of Natural History, and of a report by a Special Committee of the Asiatic Society, appointed to examine that collection.

‘2nd. In reply, I am directed to state, that the President in Council cannot regard a collection of prepared Birds, and other animals, as falling within the class of objects which the Government of India expressed its readiness to receive from the Society recommendations to purchase, or otherwise procure. Such preparations have always appeared to Government to be too perishable to be made objects of collection in a climate like that of Bengal, and fall within the exception referred to in the last paragraph of my letter, dated the 26th July, 1837. His Honor in Council cannot therefore entertain the proposition that the Government should purchase Major Hay’s extensive collection of objects of Natural History, but would suggest that the specimens are better adapted for the Museums of Europe, where the climate is less destructive.

‘I am, Sir, your obedient servant,

‘H. T. PRINSEP,

‘*Council Chamber, the 6th Jan. 1839.*’

‘*Secy. to the Govt. of India.*’

Read a letter from Dr. LORD, dated Peshawar, 14th November 1838, forwarding two boxes of specimens of Natural History, collected by him while he was attached to Capt. BURNES'S mission.

Read a letter from J. G. MALCOLMSON, Esq. regarding M. AGASSIZ' opinions on the erratic blocks of the Jura, &c. &c.

Read a letter from Mr. PRICHARD to Mr J. W. GRANT, on the microscopic examination of lignite from Sandway.

Notes on the dissection of the *Arctonix Collaris*, by Dr. GEO. EVANS.

A paper on Artificial Hatching in Egypt, by M. DEMAS.

Notes on a new genus of the *Fissirostres*, *Todidae*, Vigors, by Mr. B. H. HODGSON.

On the conclusion of the business, the Officiating Secretary read the following report from Col. D. M'LEOD, Chief Engineer, on the best and most economical mode of extending the accommodation of the Society's House, with the view of having carried into effect any additions and improvements that may be determined on, simultaneously with the general repairs of the building, now become absolutely necessary for its preservation.

Col. D. M'LEOD, also forwarded two plans, No. 1 and 2, with his report, and an estimate from Messrs. SHERRIFF and Co., the builders, amounting to rupees 10,664-15.

' To the Officiating Secretary to the Asiatic Society.

' SIR,—In compliance with the desire expressed at the last meeting of the Society, that I would examine and report on the best and most economical means of extending the accommodation of the Society's House, with the view of having carried into effect any additions and improvements that may be determined on, simultaneously with the general repairs of the building, now become absolutely necessary for its preservation, I beg leave to state to you, for communication to the next meeting of our Society, that I have repeatedly, and carefully examined the building in communication with Mr. ROWE, the builder, and with reference to the extent of additional accommodation which I am led to understand will soon be found desirable, if not indispensable, for the Society's rapidly increasing collections in all departments. I have the honor to report my opinion as follows:

' 2nd. In addition to the ordinary repairs of cleaning up the interior and exterior of the building, and painting, it has been ascertained that the decayed state of the staircase roof is such as to demand its immediate removal, and renewal; and it is, I believe, generally agreed that a skylight in that apartment, or in the passage between it and the Hall is indispensable, as the effect of the valuable collection of pictures placed there is quite lost, from the absence of a proper or sufficient light. The roof of the staircase, however, being about three feet higher than that of the passage, the light from the former would in a great measure be intercepted by the architrave over the colonnade, and would consequently be so far defective. I would therefore recommend its being placed on the roof of the passage, in its centre, on a design (a drawing of which accompanies) now of general adoption in the Department of Public Works, and which I have always found to answer the purpose extremely well, and to continue water proof. The cost of such a skylight, measuring eight feet by six feet, as appears by Mr. ROWE'S estimate, will only amount to Rs. 150.

' 3rd. It was also I believe admitted, that a small staircase leading to the roof, such as is appended to almost every dwelling house here, is much needed, in lieu of the very inconvenient ladder, with trap door, now existing for that purpose; this deficiency I propose to supply in connection with the extension of the building, which I have now to suggest.

' 4th. Two different modes of effecting this object have occurred to me, in both of which, however, is included the erection of a large room, in two floors of thirty-six feet by twenty-four feet, on either side of the staircase room to the east and west.

' 5th. The first, as represented in both floors of plan No. 1, would leave the present

staircase (which is in substantial condition) precisely as it now stands, and the proposed new side rooms free and entire, with the exception of having the northern part of one side cut off for the purpose of adding a small back stairs, and a retiring closet attached thereto. The cost of this arrangement, including the sky light, exclusive of the removal of the decayed roof, and of other repairs, is shewn in Mr. ROWE's estimate No. 1, to be rupees 8485-10, and if interior new doors are not judged requisite to the new rooms in the upper floor, this estimate will be reduced to rupees 7861-10, as there exist old ones which may be applied to the lower floor.

'6th. The second, as represented in plan No. 2, would remove entirely the present double staircase, and introduce it as a handsome single one into the curtailed new side room. The very thick walls now existing in the basement on each side of the flight of stairs, as well as the colonnades over them, would in this case become quite unnecessary, and ought to be removed, so as to leave the whole of that apartment from wall to wall, in the line of east and west, free, and uninterrupted both above and below. The extra accommodation thus to be obtained, would be about equal with that of the first proposal, and the effect produced on the general appearance of the rooms, on entering from the new staircase, would certainly be more grand and imposing; but on proceeding to arrange all matters necessarily involved in carrying this measure into effect, I find, that as shewn in Mr. ROWE's estimate No. 2, it is unavoidably more expensive than the first by rupees 3178-3-6, and as the advantage is only in appearance, I fear it must, as matter of course, be rejected in favor of plan No. 1.

'7th. Should the latter also be found too expensive to be met by the available funds of the Society, the only alteration I have at present to propose, is to reduce the size of the new side rooms, so as that the walls shall be in a line with the other walls of the house—leaving them I believe about 26×18 feet, which would of course diminish the charge considerably. But the Plan No. 1, if practicable, I would recommend, as it would be the means, I think, of preventing all future patching of the building—it provides at once two rooms of 36×24 feet and two rooms of 26×24 feet, with a suitable back stairs and closet in two floors, while it cannot be said to affect injuriously the light or the ventilation of the present apartments.

'8th. I would further beg leave to bring to the notice of the Meeting, that the dampness of the lower, or basement, floor is greatly complained of as a serious evil. I observe that this defect cannot conveniently be remedied by raising and new fluing, besides which that process would be attended with a heavy expenditure. I would therefore recommend that an expedient now successfully adopted, of laying the floor in a composition of tar and sand, (a specimen of which may be seen in the Society's House, executed I understand about two years ago by Mr. ROWE,) be resorted to in the lower apartments, to correct this evil. Its cost, as shewn, in Mr. ROWE's estimate No. 3 will be Rs. 1007.

'9th. It only remains to show in abstract the total expense in which the Society will be involved by the adoption of plan No. 1, for extending the accommodation, in addition to the requisite general repairs. The following is the abstract:

For the ordinary repairs, as per Mr. ROWE's estimate, ..	Rs.	851	8	0
For the new Roof to the Staircase,	"	771	13	0
For new laying the floor of the Basement,	"	1007	0	0
For the proposed Skylight,	"	150	0	0
For the proposed 4 additional Rooms and all connected with them,	"	7861	10	0

Grand Total of Expenditure, " 10,614 15 0

'10th In conclusion, I have to observe in reference to Mr. ROWE's estimates, that the rates are very fair and moderate throughout.

'I have the honor to be, Sir,

'Your most obedient servant,

'Fort William, February 6, 1839.'

'D. McLEOD.'

No. 2.

' Estimate for building two additional Rooms, Back Stairs, and Closet ; also removing the Staircase, &c. and fixing a new Staircase in the Western Room, as per Plan No. 2.

Building two Rooms, &c. as particularized in

Estimate No. 1. 8485 10 0

Alterations in the Staircase Room, 1 wall,

53½ × 3 × 18½ 2969½

Oue Architrave, 53½ × 2 × 3 321

Fixing Beams, 103½ × 1½ × 1½ 232½

Ditto ditto 2nd Story, 103½ × 1½ × 2½ 388

Roof and Floor, 53½ × 23 × 2 2461

6372 @ 13/8 860 3 6

Balustrade, 53½ × 1½ × 3½ 300½ 13/8 40 8 0

8 Pillars, each 20 feet, 2/ 320 0 0

Inside Cornice, 153 feet, /8 76 8 0

Outside ditto, 54 ditto, 1/ 54 0 0

WOOD WORK.

31 Beams, each 28 feet, 14 × 8 @ 1/8 1128 0 0

60 feet Architrave, 18 × 10 @ 1/ 120 0 0

2500 feet Rafter, 3 × 2 @ /6 150 0 0

Principal Staircase, including landing to be

fixed in the New Western Room, ..

900 0 0 3949 3 6

Co's. Rs. 12,434 13 6

Deduct the renewal of the decayed Roof, ..

771 0 4

11,661 13 6

N. B. The above includes changing the old roof of Staircase Room.

Resolved,—That the Society approve of Col. M'LEOD's Plan No. 1, and sanction the sum estimated for the construction of four additional rooms, and repairs of the premises, and that the Secretary be requested to communicate the resolution of the meeting to the Builders, with orders to commence the work, with as little delay as possible.

Meteorological Register, kept at the Assay Office, for the Month of February, 1839.

Forenoon, 10 A. M.													Afternoon, 4 P. M.																	
Day of the Month.	Atmospheric Pressure.			Temperature.			Hygrometry.			Aqueous tension.			Weather.			Atmospheric Pressure.			Temperature.			Hygrometry.			Aqueous tension.			Weather.		
	Old Stand Barometer.	Height at 32 Fah.	River water.	Well water.	Air.	Depression.	Differential thermometer.	Hair Hygro- meter.	By Dewpoint.	By Wetbulb.	By Hair Hy- grometer.	Wind.		Aspect of Sky.	Old Stand Barometer.	Height at 32 Fah.	Air.	Dew point.	Depression.	Differential thermometer.	Hair Hy- grometer.	By Dewpoint.	By Wetbulb.	By Hair Hy- grometer.	Wind.		Aspect of Sky.			
												Direction.	Force.												Direction.	Force.				
1	30,040	037	71.7	74.8	74.3	5.7	6.9	92	71	82	n.	w.	1	hazy-cir-str.	920	901	77.9		8.5	9.0	87	61	72	s.	0.	1	cldy. haze.			
2	060	065	72.3	75.0	75.0	7.7	9.1	91	62	80	n.	o.	1	do.	942	929	75.7		4.5	4.6	95	77	89	o.	0	do.				
3	050	045	72.0	74.7	74.0	7.0	9.0	90	65	78	n.	o.	1	do.	931	908	78.0		9.0	10.0	82	50	63	s.	0.	1	haze.			
4	032	032	019	72.6	73.7	6.1	5.8	91	70	80	n.	w.	0	do.	885	867	79.7		11.6	11.5	79	50	57	s.	w.	2 1/2	cldy. haze.			
5	988	986			74.9	3.4	3.7	98	82	95	s.	o.	1	cir-str-haze	853	853	80.3		9.4	9.6	85	59	68	s.	e.	2 1/2	do.			
6	982	968	73.4	76.2	76.7	5.4	6.0	92	74	82	s.	w.	1	cldy. drizzle.	914	899	77.2		6.2	5.9	90	70	78	N.	e.	1 1/2	do. drizzle.			
7	020	001	73.2	76.0	75.2	5.2	9.4	94	75	86	o.	0		clearing.	942	927	75.9		6.6	6.3	89	69	76	n.	o.	2	cir. cum. & st.			
8	977	977	73.2	75.9	75.0	6.7	9.0	90	67	78	s.	o.	1	drill.	920	905	75.5		10.9	11.2	78	50	56	s.	o.	2	cldy. cir. cum.			
9	948	948			72.5	9.4	9.1	80	52	59	s.	o.	1	overcast.	827	806	77.3		12.6	12.0	74	44	49	N.	w.	2 1/2	clear.			
10																														
11	908	892	76.4	76.0	75.7	4.6	5.1	91	77	87	s.	E.	1 1/2	cldy cir-str.	785	755	81.5		8.2	8.8	89	65	76	s.	E.	3 1/2	cir. cum.			
12																														
13																														
14	844	843			78.9	5.5	5.9	94	75	87	s.	o.	3	cldy. cir-str.	725	694	84.4		9.1	9.7	89	62	76	s.	e.	3	Fine.			
15	786	773	77.4	76.7	79.3	5.1	5.7	95	76	89	s.	e.	5	cir. cum. bz. fr.	663	630	84.9		7.8	8.8	89	67	76	s.	E.	5 1/2	cir. cum.			
16	732	733	77.4	76.2	78.0	9.1	9.2	82	60	63	N.	1	1	clear.	631	637	85.5		15.7	15.7	72	39	46	s.	e.	2 1/2	Fine.			
17	860	832	77.0	75.7	78.9	9.0	10.0	82	60	63	N.	1	1	do.	750	730	85.2		16.7	16.5	70	35	44	n.	o.	1	do.			
18	914	894	75.7	75.4	76.8	11.5	12.1	74	47	49	N.	1	1	do.	810	775	83.7		20.4	19.2	59	22	30	n.	w.	1 1/2	do.			
19	951	938	76.3	76.2	74.0	3.6	4.2	96	82	91	n.	E.	1	do.	858	822	83.9		18.4	17.0	64	29	36	n.	w.	1 1/2	clear.			
20	002	972	76.1	75.3	78.0	13.7	13.4	92	40	46	s.	E.	1	do.	886	867	87.4		8.6	18.6	67	65	40	s.	e.	1 1/2	do.			
21	045	012	77.5	76.2	79.4	9.7	10.1	83	57	65	o.	e.	1	do.	933	915	87.3		16.6	17.0	72	37	46	s.	e.	1 1/2	do.			
22	014	975	78.6	77.5	81.7	8.4	9.3	85	60	68	s.	w.	1	do.	894	882	88.0		12.4	13.6	80	52	59	s.	e.	1 1/2	do.			
23	986	953	78.8	78.0	82.7	9.4	9.1	85	60	68	s.	o.	1	do.	868	848	93.1		14.4	11.7	78	50	56	s.	o.	1 1/2	do.			
24	970	943	79.0	78.1	82.9	9.9	10.0	83	59	65	s.	o.	1	do.	850	827	93.0		17.0	16.0	69	40	42	s.	w.	1 1/2	do.			
25	954	931									s.	e.	1	do.	815	798	92.8		17.9	18.0	71	37	45	s.	w.	1 1/2	do.			
26	891	862	78.3	77.0	85.4	16.3	17.3	78	36	46	s.	e.	1	do.	784	756	93.1		21.4	22.7	64	27	36	s.	e.	2	cir. cum.			
27	872	837	78.6	77.3	84.7	13.8	14.1	77	45	54	n.	w.	2	cir. cum.	776	756	92.4		18.1	15.1	69	36	42	n.	o.	1 1/2	clear.			
28																														
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